INDEX TO VOLUME 105

AUTHORS

Allan, G. W., 129, 132, 135
Amikam, B., 747
Amos, W. T., 85
Arvanitakis, C., 827
Ashbaugh, D. G., 111
Avery, M. E., 971
Ayers, W. R., 914
Baker, A. P., 368
Baker, H., 839
Balchum, O. J., 410, 644
Bardine, A. L., 736
Barrett-Connor, E., 140
Bates, D. V., 1
Bates, J. H., 388
Bauman, D. S., 968
Bearman, S., 114
Beavers, C. D., 845
Benjamin, S., 126
Berg, W. Chr., 68
Berger, H. W., 458
Berman, D. T., 95
Biddle, M., 410
Black, L. F., 891
Bland, J. H., 75
Blokzijl, E. J., 932
Bowman, B. U., 85
Brinkman, G. L., 351
Brooks, S. M., 640
Browder, A. A., 299
Brown, C. V., 206
Brown, J., 95
Buraczewska, M., 22
Burke, F. G., 917
Busey, J. F., 812
Butler, J., 449
Caldwell, E. J., 75
Cantow, E. F., 417
Carevic, N., 954
Carlson, C. J., 835
Carr, D. T., 854
Chakrin, L. W., 368
Chan-Yeung, M., 819
Chatim, A., 455
Cheney, Jr., F. W., 449
Chernick, V., 461
Chick, E. W., 968
Childress, M. E., 318
Chodosh, S., 792
Clausen, J. L., 251
Cohen, A. A., 382
Cohen, C. A., 251
Cohen, R., 532
Comstock, G. W., 920
Convery, F. R., 974
Cordray, D. R., 417
Cortez, L. M., 823
Coster, J. F., 140
Cotes, J. E., 30
Cutillo, A., 756
Damodaran, V. N., 118
David, H. L., 944
Delgrossi, S., 756
Desanctis, N., 368
De Sutter, P., 304
Di Benedetto, R., 139
Dickinson, J. M., 519
Doershuk, C. F., 461
Domm, B. M., 42
Donets, J. I., 715
Downes, J.J., 461
Dries, C., 368
Drucker, J. P., 974
Earle, R. H., 572
Eberle, B. J., 628
Eckardt, R. E., 854
Edelman, M. H., 114
Elliott, R. C., 417
Esterly, J. R., 572
Fahy, A., 311
Fairfax, B. D., 393
Falk, G. A., 14
Fallon, R. J., 129, 132, 135
Fattal, G. F., 358
Fawell, J. K., 849
Ferris, B. G., Jr., 30, 854
Fishburne, H. B., 805
Fleshman, K., 564
Fraser, R. I., 920
Fuller, L. F., 123
Gee, J. B. L., 42
Geer, J. C., 85
Gerstein, A. R., 621
Giammona, S. T., 236
Gilbert, L. A., 683
Gimeno, F., 68
Gold, W. M., 425
Gomez, F., 964
Gossain, V. V., 621
Gottlieb, L. S., 425
Gottlieb, L. S., 644

GOVINDARAJ, M., 842
GREENBERG, H. B., 528
GREENBERG, S. D., 302
GRIFFON, A. L., 299
GROSS, M., 572
GRUFT, H., 618
GRZYBOWSKI, S., 819
GULERIA, J. S., 900
GUNNELS, J. J., 388
GWALTNEY, J. M., JR., 805
GYORKEY, F., 302
GYORKEY, P., 302
HARUN, H., 455
HEITNER, M., 971
HENDLEY, J. O., 805
HENNING, H. G., 618
HILVERING, C., 932
HOBBY, G. L., 292
HOLDEN, M., 854
HOLMAN, C. W., 287
HUDSON, A. R., 251
HUGHES, J. D., 974
HURLBURT, W. B., 283
HYATT, R. E., 891
HYDE, L., 453
INGRAM, R. H., JR., 541
ISHIKAWA, S., 358
JACKETT, P. S., 519
JACOBS, S., 528
JAIN, B. P., 900
JALOWAYSKI, A. A., 236
JANES, A. W., 621
JANOFF, A., 121
JENKINS, D. E., 302
KAHANA, L. M., 217
KAPLAN, G. J., 920
KANE, R., 296
KELTZ, H., 637
KHANDEKAR, J. D., 457
KINO, T., 105, 832
KISCH, A. L., 628
KLAUSTERMEYER, W. B., 268
KLEIN, R. G., 229
KLEINERMAN, J., 586
KLEINERMAN, J., 768
KNELSON, J. H., 251
KNOKE, J. D., 586
KOHARA, Y., 105
KRUMHOLZ, R. A., 421
KWIATKOWSKI, B., 22
LABELLE, Y. L., 625
LAL, P., 578
LANDA, J., 747
LAPP, N. L., 968
LEES, A. W., 129, 132, 135
LEFRAK, S. S., 139
LENERT, T. F., 292
LINCOLN, E. M., 683
LINDSAY, D. A., 242
LITT, M., 308
LORIAN, V., 632
LUCHSINGER, P., 914
MACFARLANE, J. R., 287
MAGNIN, G. E., 827
MAHER, G. G., 458
MANDELL, G. L., 123
MANOWSKA, W., 22
MARINKOVICH, V. A., 229
MASSARO, D., 927
MASSARO, G. D., 927
MATSUBA, K., 908
MATSUMURA, Y., 262
MCCUTCHEN, J. J., 382
MCELLIGOTT, T. F., 276
MEAD, J., 552
MEDICI, T. C., 792
MELLINS, R. B., 461
MILLEDGE, J. S., 126
MILLER, R. B., 541
MINTZ, S., 640
MITCHELL, R. S., 139
MITCHISON, D. A., 519
MITTMAN, C., 430
MIYAMOTO, T., 262
MIZUNO, K., 262
MOLDOW, R. E., 114
MORGAN, W. K. C., 968
MOTTRAM, M., 318
MOY, G., 318
MURRAY, D. BRADLEY, 914
NAGANNA, K., 578
NARAIN, R., 578
NEFF, T. A., 111, 318
NEWMAN, A. J., 849
NIEWOEHNER, D. E., 586
OBENOUR, W. H., 382
OKINAKA, A. J., 14
OLDS, J. W., 628
OLSEN, C. R., 268
OLSEN, G. N., 611
OMBONI, E., 756
OSHIMA, Y., 262
OVERFIELD, E. M., 532
PANDE, J. N., 900
PANKEY, G. A., 823
PEMBERTON, J. R., 605
PETERS, G. N., 564
PETTY, T. L., 111
PFLUG, A. E., 449
POPIEWICZ, J., 358

POTI, S. J., 715
RALEIGH, J. W., 397
RAO, S., 410
RDULTOWSKA, H., 22
READ, J., 242
REED, R. E., 845
RICHARDS, W. D., 605
ROBINSON, J. L., 410
ROSE H. D., 306
RYAN, S. F., 776
SABATH, L. D., 632
SACKNER, M. A., 747
SAHA, N. C., 118
SAMORTIN, T., 637
SAVARD, E. V., 393
SAYERS, D., 644
SCHMIDT, L. H., 183
SCHONELL, M. E., 819
SEAL, R. B., 417
SHARMA, O. P., 855
SEN, S. K., 827
SINCLAIR, J. C., 461
SISKIND, G. W., 14
SLUITER, H. J., 68
SMITH, J., 129, 132, 135
SMITH, J. M., 851
SMOAKE, J. A., 854
SNELL, R. E., 914
SNYDER, I. S., 393
SOBONYA, R. E., 768
SOKOLOWSKI, J. W., 417
SPICER, S. S., 368
STĂNESCU, D. C., 304
STEENHUIS, E. J., 932
STEVENS, P. M., 382
STIGOL, L. C., 552
STONE, D. J., 637
STUBBS, S. E., 891
SUTLIFF, W. D., 60
SUZUKI, T., 262
SWENSON, E. W., 611
SWIFT, D. E., 308
TAEUSCH, H. W., JR., 971
TAMMELING, G. J., 68
TANZIL, H. O. K., 455
TATE, L. A., 541
THURLBECK, W. M., 217
TORRIE, J. H., 95
TRAUTMAN, R. J., 845
TSUJI, S., 105, 832
TYRRELL, W. F., 129, 132, 135
UTOMO, R. R., 455
VAN DE WOESTIJNE, K. P., 304
VAN DIJL, W., 932
VANDIVIERE, H. M., 296
VAN GANSE, W. F., 30
VAN HAERINGEN, J. R., 932
VASSALLO, C. L., 42
VAWTER, G. F., 552
VISWANATHAN, R., 856
WALKER, R. W., 625
WARDELL, JR., J. R., 368
WARING, W. W., 461
WASAN, S. M., 276
WEGNER, T. N., 845
WEISS, E., 640, 835
WEST, J., 747
WIJSMULLER, G., 736
WILLOUGHBY, W. F., 50
WILSON, J. F., 564
WILSON, J. N., 628
WINN, W. R., 268
WOLINSKY, E., 964
WYATT, J. P., 358
YOKOYAMA, E., 594
ZIMPFER, F. 964
ZYKOV, M. P., 715

SUBJECTS

Acetylcholine, inhaled, effects on respiratory sensitivity to, in guinea pigs, 262
Acid-fast bacillus *M. chelonei*, pulmonary mycobacteriosis due to rapidly growing (case report), 618
Adults
  coronavirus infections in working, 805
  nonsmoking, respiratory symptoms, spirometry, and oxidant air pollution in, 251
Africa, characteristics of *M. tuberculosis* in, 715
Air
  flow limitation, expiratory, mechanism of, in chronic obstructive pulmonary disease associated with alpha$_1$-antitrypsin deficiency, 891
  pollutants and human lung, 1
  pollution, oxidant, in nonsmoking adults, 251
Airway obstruction, chronic, use of cuffed endotracheal tubes for severe exacerbations of, 268
Alaska, 1970, tuberculosis in, 920
Alpha$_1$-antitrypsin
  deficiency, mechanism of expiratory airflow limitation in chronic obstructive pulmonary disease associated with, 891
  inhibition of human granulocyte elastase by serum (Note), 121
Alveolar microlithiasis, pulmonary, (case report), 105
Alveolitis, fibrosing, experimental, 776
American Thoracic Society
  Diagnostic mediastinoscopy, Statement of the Committee on Therapy, 487
  Guidelines for inhalation therapy, Statement by Committee on Inhalation Therapy, 653
  Organization and committee structure 1971-72, 141
  Respiratory care in infants and children, Report of the Ad Hoc Committee on Respiratory Care in Infants and Children, 461
  Necrology, 162, 658
  Notices, 161, 320, 489, 656, 859
Amphotericin B
  dosage for chronic pulmonary histoplasmosis, 60
  therapy and 2-hydroxystilbamidine, in blastomycosis, 812
Amyloidosis
  primary tracheobronchial (case report), 425
  pulmonary, simulating tuberculosis (case report), 114
Anesthesia machine, *Pseudomonas aeruginosa* acquired from contaminated (Note), 628
Antihistamine and vitamin supplement, influence of, on thiacetazone side effects (WHO), 315
Antitrypsin deficiency, simple screening test for (Note), 851
Arteritis, pulmonary, induced by cationic proteins, 50
Artery, human pulmonary, ultrastructure of atherosclerosis in, 351
Aspergillus infections and mechanical control of hospital ventilation (Note), 306
Asthma
  bronchial, arterial desaturation after sodium bicarbonate therapy in, (Note), 126
  exercise-induced, 42
  lack of direct evidence that bronchospasm is prime factor in production of (Note), 839
  mortality, 883
Atherosclerosis, ultrastructure of, in human pulmonary artery, 351
Bacteria, interaction of, with pulmonary surfactant, 236
Barnwell, J., lecture
  fourth, 183
  introduction to, 319
Bat feces, histoplasmosis isolated from, in West Virginia (Note), 968
BCG vaccination, influence of isoniazid on tuberculin allergy and induction of (WHO), 314
Beta-adrenergic stimulation, exogenous, hyperventilation as manifestation of (Note), 637
Blastomycosis
  comparative study, 812
  fulminating fatal pneumonia due to (case report), 827
Blood volume, pulmonary capillary, in chronic obstructive lung disease, 932
Bone and joint tuberculosis, trauma in etiology of (case report), 954
Books
  Automatic Ventilation of the Lungs. Second edition. By William W. Mushin,

L. Rendell-Baker, Peter W. Thompson, and W. W. Mapleson, 648
Primary Tuberculosis in Childhood. By Jacques Gerbeaux, 857
Principles and Practice of Inhalation Therapy. By J. A. Young and D. Crocker, 650
A Second Portfolio of Chest Radiographs. By B. T. Le Roux, T. C. Dodds, and Andrew Logan, 648
Breath sounds, recording of (Note), 835
Bronchi, morphometric studies of, in young smokers, 768
Bronchial
obstruction, spirometry-induced, 68
washings of patients with chronic obstructive pulmonary disease, immunoglobulins in, 14
Bronchiolar walls, morphometric study of, in children, 908
Bronchitis, chronic
regional, 586
reticuloendothelial system in, 792
Bronchography. *See* Roentgenology
Bronchoscope, valve ventilator attachment for (Note), 644
Bronchospasm prime factor in production of asthma, lack of evidence that (Note), 839
Canine. *See* Dog(s)
Carbon dioxide, ventilatory response to, and to exercise in relation to pathophysiologic type of chronic obstructive pulmonary disease, 541
Carcinoma. *See* Tumors
Cattle, mycobacterial sensitins in, 95
Chemoprophylaxis trial in India against tuberculosis (WHO), 311
Children
disease in, due to mycobacteria other than *M. tuberculosis*, 683
elastic recoil of lung in, 552
failures of tuberculosis control in (WHO), 137
morphometric study of bronchial and bronchiolar walls in, 908
on-line information system for, with pulmonary diseases, 914
respiratory care in (ATS report), 461
technique for bronchography in, 564
Chylothorax (case report), 287
Cigarettes. *See* Smoking
Coccidioides immitis, development of phagocytic response by polymorphonuclear leukocytes recovered from venous blood of dogs inoculated with (Note), 845
Coccidioidomycosis, focal endemic, in Los Angeles county, 410
Conservative treatment of acute respiratory insufficiency in patients with chronic obstructive lung disease, 932
Cor pulmonale, functional morphometry of myocardial fibers in, 358
CORRESPONDENCE
Another attempt to induce high altitude pulmonary edema in monkeys, 856
Chronic nonspecific respiratory disease, Berlin, New Hampshire 1961-1967: a cross sectional study, 854
Hypersensitivity reactions and liver toxicity attributed to isoniazid, 139
Nonvalue of sputum culture in the diagnosis of pneumonia, 139
Systemic sarcoidosis with severe involvement of the upper respiratory tract, 139
Treatment of sarcoidosis, 855
Tuberculin sensitivity in elderly patients, 854
Tuberculin skin test, 855
Unilateral pulmonary edema resulting from treatment of spontaneous pneumothorax, 318
Cryptococcosis, pulmonary, due to *Cryptococcus albidus* (case report), 421
Cuffed endotracheal tubes, use of, for severe exacerbations of chronic airway obstruction, 268
Dehydration, effect of, on ventilatory capacity in normal subjects (Note), 842
Diffusing capacity, membrane, and pulmonary capillary blood volume in chronic obstructive lung disease, 900
Dog(s)
innoculated with *Coccidioides immitis* or vaccinated with irradiated spherule vaccine, development of phagocytic response by polymorphonuclear leukocytes recovered from venous blood of (Note), 845
lungs, excised, effect of ventilation with ozone on pressure-volume relationships of, 594
trachea, synthesis and secretion of macromolecules by, 368
Drugs, antituberculous, action of rifampin and ethambutol in combination with other (Note), 292
Dye test, nitroblue tetrazolium (Note), 123
Edema
high altitude pulmonary, another attempt to induce, in monkeys (correspondence), 856
unilateral pulmonary, resulting from treat-

ment of spontaneous pneumothorax (correspondence), 318
Electron microscopic study of interstitial pulmonary fibrosis, 276
Emphysema
experimental pulmonary, automated method of quantitating (Note), 849
pulmonary
suface tension and static volume-pressure hysteresis in, 217
symposium on, 430
Erythematosus, systemic lupus, pulmonary alteration in, 572
Ethambutol
and isoniazid in previously untreated patients with pulmonary tuberculosis (Note), 135
and rifampin
action of, in combination with other antituberculous drugs (Note), 292
re-treatment of pulmonary tuberculosis with (Note), 129
sporotrichoid *M. marinum* infection treated with (case report), 964
Exercise
-induced asthma, 42
ventilatory response to, in relation to pathophysiologic type of chronic obstructive pulmonary disease, 541
Fibrinolysis, blood, effect of hemoptysis on (Note), 457
Fibrosis, interstitial pulmonary, electron study of, 276
Freon inhalation, changes occurring after (Note), 640
Furazolidone, acute pulmonary hypersensitivity to (case report), 823
Gas, inspired, effects of respiratory frequency on distribution of, 756
Goodpasture's syndrome (case report), 621
Granulocyte elastase, inhibition of human, by serum alpha$_1$-antitrypsin (Note), 121
Guinea pigs
effects of ozone, nitrogen dioxide, and sulfur dioxide on allergic respiratory disorder in, 262
failure to produce experimental sarcoidosis in, with *M. tuberculosis* and mycobacteriophage DS6A, 85
Hemoptysis, effect of, on blood fibrinolysis (Note), 457
Herniation, atraumatic, of liver (case report), 959
Hip replacement, total, with polymethylmethacrylate and lack of early effect on lung function in man (Note), 974
Histoplasmosis
chronic pulmonary, amphotericin B dosage for, 60
combined field and laboratory epidemic of (Note), 968
isolated from bat feces in West Virginia (Note), 968
Hospital, community, diagnosis and treatment of 20 tuberculous patients who entered, 528
Hydrocortisone, acceleration lung maturation and increased survival in premature rabbits treated with (Note), 971
Hypersensitivity
acute pulmonary, to furazolidone (case report), 823
delayed, two depositories of immunocompetent cells for (Note), 832
reactions and liver toxicity attributed to isoniazid (correspondence), 139
Hyperventilation as manifestation of exogenous beta-adrenergic stimulation (Note), 637
Hypoxemia, arterial, diffusion component of, 532
Hysteresis, static volume-pressure, and surface tension in pulmonary emphysema, 217
Immunocompetent cells, two depositories of, for delayed hypersensitivity, (Note), 832
Immunoglobulins in the bronchial washings of patients with chronic obstructive pulmonary disease, 14
India
chemoprophylaxis trial against tuberculosis in (WHO), 311
socio-epidemiologic study of outpatients attending city tuberculosis clinic in (WHO), 312
Infants and children, respiratory care in (ATS report), 461
Infection(s)
coronavirus, in working adults, 805
mycobacterial, multiple simultaneous tuberculin skin-testing in prediction of (Note), 296
sporotrichoid *M. marinum,* treated with rifampin-ethambutol (case report), 964
Inhalation
freon, changes occurring after (Note), 640
therapy, guidelines for (ATS statement), 653
Intubation, bronchofiberscopic observations of tracheobronchial tree during, 747
Isoniazid

and ethambutol in previously untreated patients with pulmonary tuberculosis (Note), 135
hypersensitivity reactions and liver toxicity attributed to (correspondence), 139
influence of, on tuberculin allergy and induction of allergy by BCG vaccination (WHO), 314
poisoning, acute, 206
and rifampin in previously untreated patients with pulmonary tuberculosis (Note), 132
John Barnwell lecture: Improving Existing Methods of Control of Tuberculosis, 183
Leukocytes, polymorphonuclear, development of phagocytic response by, recovered from venous blood of dogs inoculated with *Coccidioides immitis* or vaccinated with irradiated spherule vaccine (Note), 845
Liver
atraumatic herniation of (case report), 959
toxicity and hypersensitivity reactions attributed to isoniazid (correspondence), 139
Los Angeles county, focal endemic coccidioidomycosis in, 410
Lung
carcinoma of, and miliary tuberculosis (case report), 111
disease
chronic obstructive
conservative and respirator treatment of acute respiratory insufficiency in patients with, 932
effects of respiratory frequency on distribution of inspired gas in patients with, 756
membrane diffusing capacity and pulmonary capillary blood volume in, 900
pulmonary vascular responsiveness in prognosis of, 242
interstitial, and polymyositis (case report), 611
elastic recoil of, in pediatric population, 552
excised dogs', effect of ventilation with ozone on pressure-volume relationships of, 594
function, total hip replacement with polymethylmethacrylate, and lack of early effect on (Note), 974
human, and air pollutants, 1
maturation, acceleration, and increased survival in premature rabbits treated with hydrocortisone (Note), 971
mushroom worker's (case report), 819
and peritoneal cavity as two depositories of immunocompetent cells of delayed hypersensitivity (Note), 832
rabbit, effect on penicillamine on, 75
surfactant preparation, immunologic characterization of, 229
Lymphocyst, spontaneous intrathoracic (case report), 283
Macromolecules, synthesis and secretion of, by canine trachea, 368
Mediastinoscopy, diagnostic (ATS statement), 487
Microlithiasis, pulmonary alveolar (case report), 105
Morphometry, functional, of myocardial fibers in cor pulmonale, 385
Mushroom worker's lung (case report), 819
Mycobacteria other than *M. tuberculosis*, disease in children due to, 683
Mycobacteriophage(s)
DS6A, failure to produce experimental sarcoidosis in guinea pigs with, 85
typing and characterization of *M. xenopi*, 388
ultrastructure of some, 22
Mycobacteriosis, pulmonary, due to rapidly growing acid-fast bacillus, *M. chelonei* (case report), 618
Mycobacterium
chelonei, pulmonary mycobacteriosis due to rapidly growing acid-fast bacillus (case report), 618
marinum, infection, sporotrichoid, treated with rifampin-ethambutol (case report), 964
phlei, extracellular product of, 393
smegmatis, phospholipids of (Note), 625
tuberculosis
in Africa, characteristics of, 715
effect of
pulsed exposures to rifampin on uptake of uridine-14C by, 519
some penicillins on (Note), 632
failure to produce experimental sarcoidosis in guinea pigs with, 85
response of, to environmental changes, 944
xenopi, characterization and mycobacteriophage typing of, 388
Myocardial fibers, functional morphometry of, in cor pulmonale, 358
National Heart and Lung Institute workshop on epidemiology of respiratory disease, 484
Nitroblue tetrazolium dye set (Note), 123

Nitrogen dioxide, ozone, and sulfur dioxide, effects of, on allergic respiratory disordor in guinea pigs, 262
Nocardia, sensitivity of various species of, to rifampin *in vitro* (Note), 455
Obituary, William Spencer Schwartz, 160
On-line information system for pediatric pulmonary patients, 914
Oxygen flow system, intermittent, evaluation of (Note), 449
Ozone
effect of ventilation with, on pressure-volume relationships of excised dogs' lungs, 594
nitrogen dioxide, and sulfur dioxide, effects of, on allergic respiratory disorder in guinea pigs, 262
Parkinson's disease, causes of abnormal pulmonary function in, 382
Pellicle, mycobacterial, flotation of dispersed inocula with pentane for improved, 605
Penicillamine, effect of, on rabbit lung, 75
Penicillins, effect of, on *M. tuberculosis* (Note), 632
Pentane, flotation of dispersed inocula with, for improved mycobacterial pellicle, 605
Phagocytosis and granular pneumonocyte (Note), 302
Phospholipids of *M. smegmatis* (Note), 625
Plethysmograph, pressure-corrected flow body (Note), 304
Pleural effusion, massive (Note), 458
Pneumocytes, granular, 927
Pneumonia
fulminating fatal, due to blastomycosis (case report), 827
giant cell interstitial (case report), 417
nonvalue of sputum culture in diagnosis of (correspondence), 139
Pneumonocyte, granular, and phagocytosis (Note), 302
Pneumothorax, spontaneous, unilateral pulmonary edema resulting from treatment of (correspondence), 318
Polymethylmethacrylate, total hip replacement with, and lack of early effect on lung function in man (Note), 974
Polymyositis and interstitial lung disease (case report), 611
Proteins, cationic, pulmonary arteritis induced by, 50
Proteolysis, symposium on, 430
Pseudomonas aeruginosa respiratory tract infection acquired from contaminated anesthesia machine (Note), 628
Pulmonary
alterations in systemic lupus erythematosis, 572
diffusing capacity and cigarette smoking, 30
disease, chronic obstructive
immunoglobulins in bronchial washing of patients with, 14
mechanism of expiratory airflow limitation in, associated with alpha$_1$-antitrypsin deficiency, 891
ventilatory response to carbon dioxide and to exercise in relation to pathophysiologic type of, 541
function, abnormal, in Parkinson's disease, 382
vascular responsiveness in prognosis of chronic obstructive lung disease, 242
Rabbit
lung, effect of penicillamine on, 75
premature, acceleration lung maturation and increased survival in, treated with hydrocortisone (Note), 971
Respirator treatment of acute respiratory insufficiency in patients with chronic obstructive lung disease, 932
Respiratory
care in infants and children (ATS report), 461
disease
NHLI workshop on epidemiology of, 484
chronic, dermal connective tissue changes in (Note), 118
chronic, nonspecific, Berlin, New Hampshire 1961-1967: a cross sectional study (correspondence), 854
disorder, allergic, effects of ozone, nitrogen dioxide, and sulfur dioxide on, in guinea pigs, 262
frequency, effects of, on distribution of inspired gas in normal subjects and in patients with chronic obstructive lung disease, 756
insufficiency, acute, conservative and respirator treatment of, in patients with chronic obstructive lung disease, 932
sensitivity to inhaled acetylcholine, 262
symptoms, spirometry, and oxidant air pollution in nonsmoking adults, 251
tract
infection, *Pseudomonas aeruginosa*, acquired from contaminated anesthesia machine (Note), 628
upper, systemic sarcoidosis with severe involvement of (correspondence), 139
Reticuloendothelial system in chronic bron-

chitis, 792
Rifampin
effect of pulsed exposures to, on uptake of uridine-14C by *M. tuberculosis*, 519
and ethambutol
action of, in combination with other antituberculous drugs (Note), 292
re-treatment of pulmonary tuberculosis with (Note), 129
sporotrichoid *M. marinum* infection treated with (case report), 964
and isoniazid in previously untreated patients with pulmonary tuberculosis (Note), 132
sensitivity of various species of *Nocardia* to, *in vitro* (Note), 455
in treatment of advanced pulmonary tuberculosis, 397
Roentgenology
bronchography in children, technique for, 564
Sarcoidosis
experimental, in guinea pigs with *M. tuberculosis* and mycobacteriophage DS6A, 85
systemic, with severe involvement of upper respiratory tract (correspondence), 139
treatment of (correspondence), 855
Sensitin, mycobacterial, in cattle, 95
Skin test
multiple simultaneous tuberculin, in prediction of mycobacterial infections (Note), 296
tuberculin, clinical significance of (Note), 453
Smoking
cigarette, and pulmonary diffusing capacity, 30
morphometric studies of bronchi in young smokers, 768
respiratory symptoms, spirometry, and oxidant air pollution in nonsmoking adults, 251
Sodium bicarbonate therapy, arterial desaturation after, in bronchial asthma (Note), 127
Spirometry
-induced bronchial obstruction, 68
respiratory symptoms, and oxidant air pollution in nonsmoking adults, 251
Sporotrichoid *M. marinum* infection treated with rifampin-ethambutol (case report), 964
Sputum culture, nonvalue of, in diagnosis of pneumonia (correspondence), 139
Sulfur dioxide, ozone, nitrogen dioxide, effects of, on allergic respiratory disorder in guinea pigs, 262
Surfactant
lung, preparation, immunologic characterization of, 229
pulmonary, interaction of bacteria with, 236
Tension, surface, and static volume-pressure hysteresis in pulmonary emphysema, 217
Thiacetazone side effects, second international cooperative investigation into (WHO), 315
Tine tests, tuberculin, on medical wards (Note), 299
Tissue, dermal connective, changes in chronic respiratory diseases (Note), 118
Trachea, canine, synthesis and secretion of macromolecules by, 368
Tracheobronchial tree during intubation, bronchofiberscopic observations of, 747
Trauma in etiology of bone and joint tuberculosis (case report), 954
Tuberculin(s)
allergy, influence of isoniazid on (WHO), 314
method of characterizing, 736
sensitivity in elderly patients (correspondence), 854
skin test
clinical significance of (Note), 453
correspondence, 855
multiple simultaneous, in prediction of mycobacterial infections (Note), 296
tine tests on medical wards (Note), 299
Tuberculosis
advanced pulmonary, rifampin in treatment of, 397
in Alaska, 1970, 920
bone and joint, trauma in etiology of (case report), 954
chemoprophylaxis trial in India against (WHO), 311
control program, socio-epidemiologic study of outpatients attending city tuberculosis clinic in India to judge place of specialized centers in (WHO), 312
epidemiology and failure of tuberculosis control in children (WHO), 137
improving existing methods of control of, 183
miliary, and carcinoma of lung (case report), 111
pulmonary
amyloidosis simulating (case report), 114

isoniazid and ethambutol in previously untreated patients with (Note), 135
nonspecific sensitivity and its influence on incidence of, 578
re-treatment of, with rifampin and ethambutol (Note), 129
rifampin and isoniazid in previously untreated patients with (Note), 132
Tumors
carcinoma of lung and miliary tuberculosis (case report), 111
2-hydroxystilbamidine and amphotericin B therapy in blastomycosis, 812
Ultrastructure of some mycobacteriophages, 22
United States spared epidemic of deaths due to asthma, 883
Uridine-14C, effect of pulsed exposures to rifampin on uptake of, by *M. tuberculosis*, 519
Vaccine, irradiated spherule, development of phagocytic response by polymorphonuclear leukocytes recovered from venous blood of dogs vaccinated with (Note), 845
Ventilation
hospital, mechanical control of, and *Aspergillus* infections (Note), 306
with ozone, effect of, on pressure-volume relationship of excised dogs' lungs, 594
Ventilatory
capacity, effect of dehydration on, in normal subjects (Note), 842
response to carbon dioxide and to exercise in relation to pathophysiologic type of chronic obstructive pulmonary disease, 541
Vitamin and antihistamine supplement, influence of, on thiacetazone side effects (WHO), 315
Walls, bronchial and bronchiolar, morphometric study of, in children, 908
Wards, medical, tuberculin tine tests on (Note), 299
West Virginia, histoplasmosis isolated from bat feces in (Note), 968
Workers, mushroom, lung (case report), 819
World Health Organization Bulletin abstracts
Feasibility of a chemoprophylaxis trial in India against tuberculosis, 312
Influence of isoniazid on naturally acquired tuberculin allergy and on induction of allergy by BCG vaccination, 314
Second international cooperative investigation into thiacetazone side effects, 315
Socio-epidemiological study of outpatients attending city tuberculosis clinic in India, 312
Tuberculosis epidemiology and failures of tuberculosis control in children, 137

INDEX OF ABSTRACTS

List of Journals Abstracted

Acta Chirurgica Scandinavica (Stockholm)
Acta Medica Scandinavica (Stockholm)
Acta Paediatrica Scandinavica (Stockholm)
Acta Pathologica et Microbiologica Scandinavica (Kobenhavn)
Acta Physiologica Scandinavica
Acta Radiologica; Diagnosis (Stockholm)
Acta Radiologica; Therapy, Physics, Biology
American Heart Journal
American Journal of Clinical Pathology (Baltimore)
American Journal of Epidemiology (Baltimore)
American Journal of the Medical Sciences (Philadelphia)
American Journal of Medicine
American Journal of Nursing
American Journal of Pathology (New York)
American Journal of Public Health (New York)
American Journal of Surgery (New York)
Anesthesiology (Philadelphia)
Annales Chirurgiae et Gynaecologiae Fenniae (Helsinki)
Annales de l'Institut Pasteur de Lille
Annales de l'Institut Pasteur (Paris)
Annali dell'Istituto Carlo Forlanini (Roma)
Annals of Clinical Pediatrics (Athens)
Annals of Internal Medicine
Annals of Surgery (Philadelphia)
Antimicrobial Agents and Chemotherapy
Archives of Disease in Childhood (London)
Archives of Environmental Health
Archives of Internal Medicine (Chicago)
Archives of Pathology (Chicago)
Archives of Surgery (Chicago)
Archivos Argentinos de Dermatologia (Buenos Aires)
Archivos del Instituto de Cardiologia de Mexico
Australian and New Zealand Journal of Medicine
Beitraege zur Klinik und Erforschung der Tuberkulose und der Lungenkrankheiten (Berlin)
Boletin Medico Hospital Infantil (Mexico)
British Journal of Diseases of the Chest (London)
British Journal of Experimental Pathology (London)
British Journal of Industrial Medicine (London)
British Journal of Pharmacology (London)
British Journal of Preventive and Social Medicine (London)
British Journal of Radiology (London)
British Medical Journal (London)
Bulletin de Physio-Pathologie Respiratoire
Bulletin of the World Health Organization (Geneve)
Cancer (Philadelphia)
Canadian Medical Association Journal (Toronto)
Central African Journal of Medicine (Salisbury, Rhodesia)
Chest (Chicago)
Circulation; Journal of the American Heart Association (New York)
Circulation Research (New York)
Clinical Pharmacology and Therapeutics (St. Louis)
Clinical Radiology (London)
Clinical Research
Clinical Science (London)
Danish Medical Bulletin (Kobenhavn)
Deutsche Medizinische Wochenschrift (Stuttgart)
Duodecim (Helsinki)
Enfermedades del Torax
European Journal of Clinical Investigation
Fortschritte auf dem Gebiete der Roentgenstrahlen und der Nuklearmedizin (Stuttgart)
Ftiziologia (Romania)
Gacema Medica de Mexico
Giornale Italiano delle Malattie del Torace (Milano)
Giornale di Malattie Infettive e Parassitarie (Torino)
Grudnaia Khirurgiia (Moskva)
Gruzlica i Choroby Pluc (Warszawa)
Hoja Tisiologica (Uruguay)
Hospital (Rio de Janeiro)
Indian Journal of Chest Diseases (Delhi)
Indian Journal of Medical Research (Calcutta)
Indian Journal of Tuberculosis
Japanese Journal of Chest Disease
Japanese Journal of Clinical Radiology
Japanese Journal of Thoracic Surgery (Tokyo)
Journal of Allergy (St. Louis)
Journal of the American Medical Association (Chicago)

Journal of Applied Physiology (Bethesda)
Journal of Chronic Diseases (Oxford)
Journal of Clinical Investigation (Boston)
Journal of Clinical Pathology (London)
Journal of Experimental Medicine (New York)
Journal Francais de Medecine et Chirurgie Thoraciques (Paris)
Journal of Hygiene (Cambridge, Eng.)
Journal of the Japanese Association for Infectious Diseases (Tokyo)
Journal of Laboratory and Clinical Medicine (St. Louis)
Journal of Medical Microbiology
Journal of the National Medical Association (New York)
Journal of Pathology (London)
Journal of the Royal Institute of Public Health and Hygiene (London)
Journal of Thoracic and Cardiovascular Surgery (St. Louis)
Kekkaku (Tokyo)
Khirurgiia (Moskva)
Klinische Wochenschrift (Berlin)
Laboratory Investigation (New York)
Lancet (London)
Lille Medical
Medical Clinics of North America (Philadelphia)
Medical Journal of Australia (Sydney)
Military Medicine (Washington)
Minerva Medica (Torino)
Neumologia y Cirurgia del Torax
New England Journal of Medicine (Boston)
New Zealand Medical Journal (Wellington)
Nursing Research
Pathologia et Microbiologia (Basel)
Pediatrics (Springfield, Ill.)
Pharmacologia Clinica
Polski Przeglad Chirurgiczny (Warszawa)
Polskie Archiwum Medycyny Wewnetrznej (Warszawa)
Poumon et le Coeur
Praxis der Pneumologie vereinigt mit der Tuberkulosearzt (Stuttgart)
Prensa Medica Argentina (Buenos Aires)
Problemy Tuberkuleza (Moskva)
Public Health Reports (Washington)
Publicaciones Inst. Antituberculoso (Spain)
Radiology (Syracuse)
Respiration and Circulation
Respiration; International Review of Thoracic Diseases (Basel)
Respiration Physiology
Respiratory Therapy
Revista Brasileira de Medicina (Rio de Janeiro)
Revista Clinica Espanola (Spain)
Revista do Instituto de Medicina Tropical de Sao Paulo
Revista Facultad de Medicina (Mexico)
Revista Latinoamericana de Microbiologia y Parasitologia (Mexico)
Revista do Servico Nacional de Tuberculose (Rio de Janeiro)
Revue de Tuberculose et de Pneumologie (Paris)
Rev. Tuberc. Sanat. Belem.
Romanian Medican Review (Bucuresti)
Scandinavian Journal of Respiratory Diseases (Kobenhavn)
Scandinavian Journal of Thoracic and Cardiovascular Surgery (Stockholm)
Science (Washington)
Scottish Medical Journal
Selected Papers of the Royal Netherlands Tuberculosis Association
Semaine de Hopitaux de Paris
Surgery (St. Louis)
Surgery, Gynecology and Obstetrics (Chicago)
Torax (Montevideo)
Thorax (London)
Tisiol. Pneumol.
Tubercle (London)
Tuberkuloz (Istanbul)
Tuberkuloz ve Toraks
Tuberkulozis es Tudobetegsegek (Budapest)
Turkish Journal of Pediatrics (Ankara)
Union Medicale du Canada
Wiadomosci Lekarskie (Warszawa)
Wiener Klinische Wochenschrift
Wiener Medizinsche Wochenschrift
Yale Journal of Biology and Medicine (New Haven)
Zeitschrift Fur Erkrankungen der Atmungsorgane Mit Folia Bronchologica (Leipzig)

Index of Abstracts—Authors

Aas, K., 166
Abeles, F. B., et al, 663
Abello, V. B., et al, 678
Adamson, T. E., 508
Agarwal, S. C., et al, 348
Alexander, R. H., et al, 338
Alican, F., et al, 342
Alpert, S. M., et al, 171
Anastasatu, C., et al, 344
Anderson, A. E., et al, 503
Anderson, P., et al, 869
Anderson, P., et al, 872
Anderson, S. D., et al, 510
Appel, J., et al, 336
Aoki, M., et al, 502
Aoki, M., et al, 676
Arhammar, G., et al, 337
Armstrong, J. A., et al, 504
Ashbaugh, D., et al, 674
Ashcroft, M.T., 499
Avar, P., et al, 498

Baba, H., et al, 863
Baba, H., et al, 881
Badeer, H. S., et al, 339
Baess, L., 331
Bahlman, S. H., et al, 506
Bakerspigel, A., et al, 513
Baltaxe, H. A., et al, 341
Bandini, G., et al, 180
Baris, I., et al, 881
Baron, M. G., 327
Bartholomeusz, J. H. M., 507
Bartlett, D., 505
Baum, G. L., et al, 326
Becroft, D. M. O., 665
Bector, N. P., et al, 662
Bedrossian, C. W. M., et al, 503
Bell, S. M., 874
Bellot, S., et al, 874
Beresford, O. S., 668
Berroya, R. B., et al, 501
Bisno, A. L., et al, 176
Black, A. M. S., et al, 873
Blackhall, M. I., 495
Boag, T. C., 507
Boddington, M. M., et al, 666
Bodenhoff, J., 331
Bohnen, R. F., et al, 667
Bonanno, P. C., 344
Bonica, J. J., et al, 173
Boontje, A. H., et al, 878
Bordia, N. L., 670
Bouhuys, A., 865
Boysen, G., et al, 510
Bridges-Webb, C., 869
Brine, J. A. S., et al, 875
Brogan, T. D., et al, 500
Brown, J. H., 515
Brun, J., et al, 180
Brunstetter, M. A., et al, 172
Budhraja, S. N., 676
Budhraja, S. N., et al, 677
Burton, R. C., et al, 880
Bwibo, N. O., 348
Byrd, R. B., et al, 501

Cade, J. F., et al, 511
Caves, P. K., 332
Chadha, S. K., 678
Char, N. L., 677
Chaudhuri, M. R., 502
Cherubin, C. E., 329
Chishty, S. M. K., 666
Coe, R. M., et al, 671
Cohen, A. B., et al, 334
Cohen, B. M., 496
Connolly, N. M., et al, 510
Corbett, T. H., et al, 166
Corwin, E., 671
Costello, R., et al, 503
Cradock-Watson, J. E., et al, 869
Cragg, J., et al, 663
Creswell, W. H., Jr., et al, 669
Cross, C. R., et al, 172, 173
Cross, R. M., et al, 666
Crowder, J. G., et al, 330
Currie, T. T., et al, 335

DaCosta, J. L., et al, 864
Dahlstrand, S., et al, 335
Dalton, A. C., et al, 325
Danielson, M., et al, 341
Darney, P. D., et al, 516
Davidson, M., et al, 866
Davies, III, J. C., 337
Davis, J. W., et al, 176
Dayal, D., et al, 335
DeCroix, G., et al, 324
deJong, R. H., et al, 174
De Rautlin De La Roy, Y., et al, 493
Derom, Fr., et al, 179
Derrick, E. H., 495
Devadatt, S., et al, 324
Devadatta, D., 325
Doctor, A. H., 879
Donomae, I., et al, 492
Douglas, R. M., et al, 507

Edwards, P., 669
Eiger, E. I., et al, 506
Eisele, J. H., et al, 337
Elebute, E. A., 876
El Ghawabi, S. H., et al, 876
Ellis, H. T., 328
Elmes, P. C., et al, 497
Engelfeldt, B., et al, 673
Epstein, R. A., 865
Epstein, S. E., et al, 873
Evans, C. C., et al, 502
Evans, M. J., et al, 171
Evatt, B. L., et al, 336

Fauszt, I., 345
Faverso, M. S., et al, 664
Federlin, K., et al, 872
Fell, T., et al, 343
Felner, J., et al, 175
Femi-Pearse, D., et al, 673
Femi-Pearse, D., 876
Ferlinz, R., et al, 338
Fingerhut, A., et al, 674
Fisher, S., 168
Fishman, A. P., 326
Flod, N. E., et al, 512
Forgacs, P., et al, 509
Florin, A. A., et al, 177
Foj, H. M., et al, 875
Fontenelle, L. J., et al, 343
Fourcade, H. E., et al, 174
Francis, R. S., 516
Fráter, L., et al, 343
Fredericks, G. J., et al, 325
Freise, G., 513
Furcolow, M., et al, 671
Furman, S., et al, 873

Gagnon, J. H., et al, 878
Gallagher, P. J., 667
Gee, B., 865
George, C. R. P., 506
Gerbeaux, J., et al, 517
Ghuliani, K. D., et al, 329
Glass, R. C., 496

Glasser, M., et al, 166
Glick, M., et al, 866
Godfrey, S., et al, 178
Godfrey, S., et al, 509
Goldstein, E., 663
Goldsmith, J. R., 328
Gomi, J., et al, 324
Gomi, J., 660
Gomi, J., 676
Gopinath, P., et al, 337
Grace, W., 178
Gracey, D. R., et al, 339
Graff, R. F., 515
Greenfield, L. J., et al, 880
Gregory, G. A., et al, 166
Gross, P., et al, 167
Gruner, O. P. N., 665
Gupta, J. M., et al, 672
Gutteridge, B. H., et al, 496
Guz, A., et al, 511
Gwynne, J. F., 507

Hage, E., 338
Hanninen, H., 868
Hansson, H., et al, 670
Hara, K., et al, 507
Harasawa, M., 864
Harly, H. R. S., 879
Harrison, B. D. W., et al, 876
Harrison, M. O., et al, 341
Hartung, W., et al, 340
Harvey, R. M., et al, 339
Hatcher, C. R., Jr., et al, 675
Hazlett, D. R., et al, 339
Hearn, C. E., et al, 867
Heath, D., et al, 506
Hedrick, J. L., 669
Henderson, R., et al, 327
Herzog, H., et al, 676
l'Heureux, P., et al, 179
Hexter, A. C., 328
Hickey, R. F., et al, 174
Higginbotham, J. D., et al, 330
Hills, B. A., 876
Hislop, A., et al, 327
Holden, M., et al, 868
Holt, P. F., 504
Homma, Y., et al, 878
Horai, Z., et al, 870
Horwitz, C. A., et al, 507
Howard, P., 865
Hutchin, P., et al, 514
Hyman, M. D., 662

Imura, Y., et al, 877
Ioannou, J., et al, 515
Iravani, J., 333
Ishihara, T., 167
Israel, H L., et al, 165
Iwai, K., 871

Jacques, J., 332
Jansson, E., et al, 336
Jeretin, S., et al, 512, 877
Jezek, V., et al, 672
Jhalla, G. S., et al, 345, 677
Joas, T. A., et al, 173
Johnson, R. M., et al, 510
Jones, F. L., Jr., et al, 175
Jones, R., et al, 872
Jonsson, M., et al, 677
Jorgensen, K., et al, 341
Junginger, TH., 332

Kapur, K. K., et al, 677
Kálnai, E., et al, 332
Karetzky, M. S., et al, 511
Karlish, A. J., 510
Katz, J., et al, 670
Kaufman, J., et al, 167
Kawakami, Y., et al, 865
Kay, J. M., et al, 506
Keller, A. Z., 664
Keller, R., et al, 327
Kerby, G., et al, 165
Kesztele, V., 340
Kettel, L. J., et al, 663
Ketz, R. L., 173
Khaja, F., et al, 495
Khatri, B. K., 677
Kihara, K., 881
Kim, S. C., 164
Kingston, C. W., 871
Kirisawa, T., et al, 877
Kjelgaard, J. M., et al, 874
Koblinger, J., et al, 331
Kochmann, S., et al, 170
Koerner, S., 511
Koppenhagen, K., et al, 673
Kreis, B., et al, 164
Kremp, R. E., et al, 344
Kuperman, A. S., et al, 340
Kwan, M., et al, 514

Lacoste, J., 512
Lagarias, J. S., et al, 336
Landberg, T., et al, 342
Langer, A., 166
Langlands, J. H. M., et al, 497
Larsson, B., et al, 673
Larsson, S., 332, 664
Lavender, J. P., et al, 341
Leck, I., 868
Lehmann, N. I., 875
Leong, B., et al, 171
LeRoux, B. T., 880
Levy, L. S., 504
Lewis, T. R., et al, 171
Lichtiger, M., et al, 338
Lieberman, J., et al, 870
Lindars, D. C., 497
Losekoot, G., et al, 495
Lowe, J., et al, 341

Maekawa, N., et al, 862
Maheshwri, H. B., 345
Makiyama, H., 668
Malcolm, A. D., et al, 513
Marché, J., et al, 335
Marget, W., et al, 164
Marks, J. E., et al, 342
Marshall, R., 510
Mason, R. J., et al, 873
Massachusetts, Dept. of Public Health, 347, 508, 516, 816
Matisse, G., 512
Mathew, J., et al, 515
Matlof, H., et al, 664
Matsuda, M., et al, 667
Matsuyama, Y., et al, 870
Maulsby, G. O., et al, 343
Mayfield, J. D., et al, 877
Mazze, R. I., et al, 506
McCloskey, D. I., et al, 873, 875
McCollum, A. T., 336
McDonald, J., et al, 167
Meares, R. A., et al, 496
Mészáros, G., et al, 332
Meyer, J. E., et al, 331
Mikami, R., et al, 870
Miller, A., et al, 170, 177
Miller, G. I., 499
Miller, G. J., et al, 498, 509
Miller, W. F., 663
Mirchandani, S., et al, 344
Mital, O. P., et al, 332
Mitchell, R. S., 326
Mittman, C., et al, 662
Moghissi, K., 342
Moorhouse, D. E., et al, 871
Morgan, J. M., et al, 503
Morgan, W. K. C., et al, 878
Mori, T., 499
Moulding, T., 176
Murphy, R. L. H., et al, 866
Mustafa, M. G., et al, 172

Nagatomi, H., et al, 509

Nair, A. S., et al, 328
Naito, M., 165
Narain, R., et al, 325, 329
Narang, R. K., et al, 335, 347
Narasimhan, R., et al, 347
Nathoo, A. R., et al, 509
National Prefectural and Municipal Hospital Association Rifampicin Study Group, 862, 660
Neugebauer, M. K., et al, 179
Newton-John, H. F., et al, 874
Noack, W., et al, 334
Noble, J., 516
Noble, M. I. M., et al, 869, 665
Nott, D. B., 515
Nowakowski, A., et al, 326
Noyes, R., Jr., 325

Ochi, T., et al, 170
Odriozola, J., et al, 327
Ogata, M., et al, 867
Ohta, Y., 661
Oka, S., 862
Olsson, T., et al, 512
Orange, R. P., et al, 499
Orell, S. R., 667
Osato, T., 492, 500
Ota, M., et al, 343
Ota, Y., 873

Pacenza, U., et al, 165
Paez, P. N., 663
Pamra, S. P., et al, 328, 333, 347, 660
Parish, C., 501
Parrot, R., et al, 500
Paulson, D. L., et al, 880
Pearson, J. E. G., 494
Petty, T. L., et al, 662, 674, 864
Peumery, J. J., 180
Piotrowski, J. K., 665
Polk, J. W., et al, 501
Pollard, J. A., et al, 869
Prasad, G., 345
Prasad, M., et al, 346
Pratap, V. K., et al, 677
Press, A., et al, 493
Prior, A. P., 493
Proust, A. J., 492
Pueschel, R. F., 328

Quintiliani, R., et al, 175
Qulton, J. L., et al, 880

Raina, M. K., et al, 505
Raju, M. R., et al, 674
Ramachandran, R. S., et al, 348
Ramirez-R., J., et al, 337
Rao, K. P., et al, 345
Rao, S. B., 346
Ravin, M. B., 514
Rebuck, A. S., et al, 511
Reddy, C. R. R. M., et al, 348
Reid, L., 327, 871
Ribaudo, C., 178
Rimington, J., 168
Roberts, G. H., 667
Robertson, B., 338
Robinson, A. E., et al, 341
Romano, N., et al, 669
Roome, A. P. C. H., et al, 872
Rosenow, E. C., III, et al, 513
Rossi, A., et al, 178
Ruff, F., et al, 876
Ryland, D. 871
Ryley, H. C., et al, 500

Saatci, H., et al, 863
Sacerdoti, C., et al, 881
Sahi, R. P., 678
Salvaggio, J., et al, 499
Samanek, M., et al, 494
Sander, J., et al, 180
Sanderson, D., et al, 674
Sarsam, A., 880
Saxena, H., et al, 677
Scerbo, J., et al, 879
Schiffmann, G., et al, 501
Seage, A. J., et al, 499
Searle, J., et al, 669
Senda, Y., et al, 508
Serjeant, G. R., 509
Seth, O., 671
Shannon, D. C., et al, 672
Sharma, O. P., 668
Sherwin, R. P., et al, 172
Shetty, K. R., 347
Shimokata, L., 179
Shiozawa, M., et al, 169, 502
Shmock, C. L., et al, 661
Singh, S. K., et al, 661
Sinha, S. N., et al, 660
Sobol, B., 672
Sofowara, E. O., 495
Sokolowski, J. W., et al, 339
Soldberg, C. O., et al, 492
Solit, R. W., 676
Somerson, N. L., et al, 334
Spann, R. W., et al, 513
Stein, P. D., 673
Stender, H. S., et al, 513
Stephens, R. J., et al, 172
Stevens, P. M., et al, 170
Stoelting, R. K., et al, 505
Summers, D. N., et al, 869
Suri, J. C., et al, 670
Sutton, J., 499
Suzuki, T., 164

Taguchi, J. T., 665
Talamo, R., 872
Talley, N. A., et al, 669
Tamura, M., et al, 862, 863
Tanaka, T., 334
Taylor, G., et al, 496
Tesnekov, L., et al, 344
Thacker, W. C., et al, 879
Thibier, R., et al, 517
Thompson, D. H., et al, 671
Thompson, G. E., 879
Thompson, J. E., 494
Thompson, V. C., 494
Timmes, J. J., et al, 862
Toyohara, M., 164
Trethewie, E. R., 504
Trinkle, J. K., 342
Tripathy, S. P., et al, 331
Tsukamura, M., 863
Tsukamura, T., et al, 169
Tuberculosis Research Committee, 180
Tucker, G. T., et al, 174
Tuller, M. A., et al, 177

Ude, A. C., 865
Ueki, J., et al, 666

Valic, F., et al, 866
Vance, J. P., et al, 674
Van Dellen, R. G., et al, 169
Van Vliet, P. K. J., et al, 672
Vatner, S. F., et al, 872
Veith, F. J., et al, 342
Vergez, P., et al, 515
Viallier, J., et al, 171
Vikraman, V., 671
Virkkula, L., et al, 514
von Wichert, P., 333
Vyas, C. R., et al, 330

Wagenvoort, C. A., et al, 495
Waldman, R. H., et al, 504
Walker, D. D., et al, 866
Wallace, W. F. M., et al, 497
Wang, I. Y., et al, 167
Webster, I. W., 493
Weibel, E., et al, 330

Weiss, W., et al, 502
Wenzel, F., et al, 871
Wiertz, L. M., et al, 878
Wilson, R. S. E., 494
Wiklund, R. A., et al, 874
Williams, R. A., et al, 168
Wolcott, M. W., et al, 675
Wychulis, A. R., et al, 514
Yacoub, M. H., 494
Yanagawa, H., et al, 176, 177, 328
Yeager, H., Jr., 178
Yoda, T., et al, 877
Young, L. S., et al, 169
Yuan, C., et al, 673
Zack, N. B., et al, 670
Zajtchuk, Z., et al, 344
Zbar, B., 334
Zimmerman, J. E., 340
Zundel, W. E., 493
Zuskin, E., et al, 498

Abscess
amoebic liver, pulmonary complications, which exaggerate tubercular lesions in lung, 677
tuberculous, of thyroid gland, 676
Acetylene gas, pneumonia caused by inhalation of, 507
Acidosis, acute
respiratory, treatment of, in chronic obstructive lung disease, 663
reversible respiratory, in cardiogenic pulmonary edema, 177
Actinomyces in tonsillar tissue, 665
Adenoma. *See* Tumors
Adenopathy, unilateral hilar or paratracheal, in sarcoidosis, 513
Adenovirus type 21 infection in young children, 665
Adrenoreceptors, beta, negative role of, in effects of hypoxia on myocardial blood flow and oxygen consumption, 674
Adults
East Indian and African, in Guyana, respiratory disease among, 499
lung pathology in respiratory distress following shock in, 667
miliary tuberculosis in, 881
nosologic therapeutic and epidemiologic aspects of tuberculous meningitis in, 344
respiratory distress syndrome in, 674
static and dynamic lung volume and ventilation-perfusion abnormality in asthma of, 877
Aerosid, metered, of bronchodilator drugs, 496
Aetiology of byssinosis, 496
African adults in Guyana, respiratory disease among, 499
Age, significance of, of onset of asthma, 495
Aged
results of surgical treatment of pulmonary tuberculosis in, 675
mass examination of, with emphasis on obstructive pulmonary diseases, 508
tuberculous patients, 345
Air
environment, impact of energy consumption on, 336
pollutants, fate of, 663
pollution
community, association of, with mortality, 328
mortality, and weather, 166
trends at Mauna Loa, absence of, 328
Airborne tularemia in Sweden, 335
Airway(s)
central, treating obstructive diseases of, 676
obstruction chronic
continuous oxygen therapy in, 662
electrocardiogram in emphysema with and without, 661
pressure, continuous positive, treatment of idiopathic respiratory-distress syndrome with, 166
resistance in asthma, effect of age on fixed and labile components of, 495
Alabama high school, tuberculosis outbreak in, 516
Aldrin, occupational exposure to, 498
Alkalosis
acute respiratory, electrolyte changes in, 338
primary metabolic, compensatory hypoventilation and hypercapnia in, 177
Allotransplantation, bilateral simultaneous canine lung, 342
Alpha-ethyl-thioisonicotinamide and alpha-N-propylthioisonicotinamide, comparison of antituberculous activity of, 862
Alpha$_1$-antitrypsin
deficiency
heterozygous screening for, with diethylstilbestrol, and effect of oral contraceptives, 870
smoking and chronic obstructive lung disease in, 662
in man, 872
Alveo-bronchography. *See* Roentgenology
Alveolar
macrophage(s)
interference of cadmium ion with oxidative metabolism of, 172
in vitro studies of morphologic and functional characteristics, 334
pulmonary
associated with magnesium ion adenosine triphosphatase system, 173
origin of, 172
synthesis of dipalmitoyl lecithin by, 873
protein accumulation as indicator of low level oxidant toxicity, 171
surface, morphology of, 330
ventilation, method of detecting abnormal unevenness of, by single-breath oxygen inhalation, 877

Amebiasis of left lung, 661
Amitriptyline and asthma, 496
Amphotericin B, treatment of lung mycetomas by intracavitary suction and local washing with, 165
Amyloidosis in pulmonary tuberculosis, 348
Analog computer, simulation of periodic ventilations and structures of respiratory system on, 512
Anaphylaxis, slow-reacting substance of, and histamine, immunological release of, from human lung, 499
Anemia
  gas transfer sickle-cell, and lung volumes, 509
  intrapulmonary hemorrhage with, after lymphography, 878
  severe chronic, circulatory and respiratory adjustments during, 337
Anesthesia
  forane, halothane and fluroxene, in dogs, 173
  intravenous regional, pharmacokinetic aspects of, 174
  nitrous oxide-halothane, cardiovascular effects of, 506
  spinal and general, for lower abdominal surgery in patients with chronic obstructive pulmonary disease, 514
Anesthesiologists, chronic exposure to methoxyflurane a possible occupational hazard, 166
Antherosclerosis, severe coronary, effects of cigarette smoke on lactate extraction in presence of, 869
Antibiotic therapy, computerized review of, 493
Antibody
  —combining oligosaccharides from a chick allantoic glycopeptide sulfate associated with influenza virus hemagglutinin, 330
  responses and cell-mediated immunity in respiratory tract after local and systematic immunization, 504
Antifungal substance, Bay b 5097, 164
Antimycotic from Bay b 5097, 330
Aorta
  perforation of, due to tuberculosis, 170
  traumatic, to pulmonary artery fistula, 344
Aplasia, pulmonary, quantitative analysis of development of single lung, 871
Army recruits in Delhi cantonment, tuberculin sensitivity in, 329
Arteriography. *See* Roentgenology
Asbestos
  action on, 865
  chrysotile, in lungs of persons in New York City, 166
  effects of low concentrations of, in shipyard pipe coverers, 866
  mines, chrysotile, of Quebec, mortality in, 167
Asbestosis, primary intrapulmonary neurogenic sarcoma with, 332
Ascites, presented as tuberculous peritonitis, 515
Aspen conference, 13th annual, on emphysema, 326
Aspergillus flavus endaortitis following aortic valvotomy, 513
Asphyxia, perinatal, and residual placental blood volume, 512
Asphyxiation, electrical, physiological changes during, 504
Aspiration, pulmonary, 178
Asthma
  absence of intestinal parasites in, 169
  acute, 2,3-diphosphoglycerate in, 667
  amitriptyline and, 496
  bronchopulmonary lavage in, 337
  children with, disodium cromoglycate in treatment of, 496
  effect of age on fixed and labile components of airway resistance in, 495
  house dust allergy, hyposensitization in, 166
  lung mechanics during provocation of, 511
  New Orleans, 499
  severe, ventilatory response to carbon dioxide during recovery from, 511
  significance of age of onset of, 495
  signs of, in lung cancer, 870
  static and dynamic lung volume and ventilation-perfusion abnormality in, 877
Australia
  community-wide chest X-ray surveys in, 507
  Perth, prevalance of wheezing and other respiratory symptoms in school-children from, 869
  Queensland, human pulmonary dirofilariasis in, 871
  Western, pulmonary dirofilariasis in, 875
Australian
  morbidity survey, 1969-70, respiratory diseases in, 869
  rifampicin trial, 492
Bacteremia
  bacteriodes, 175
  Serratia marcescens, 330
Bagassosis, pulmonary function at rest and

during exercise following, 498
Bay b 5097
new antimycotic from, 330
orally applicable antifungal substance with broad spectrum activity, 164
BCG
vaccination, induction of allergy by, influence of isoniazid on, 329
vaccine
heat killed, as tuberculin test, 670
Indian freeze dried, 670
Belfast, insulation workers in, 497
Benzo[*a*]pyrene, enzymatic conversion of, 167
Biopsy
cases, study of tuberculosis of endometrium in, 345, 500
closed pleural, study of, 879
percutaneous pulmonary, technical considerations of, 344
Bird owners, lungs of, allergic reactions in, 513
Bis (chloromethyl) ether, induction of lung adenomas by chronic inhalation of, 171
Blood
flow
autoregulation of, in carotid body, 875
myocardial
effects of hypoxia on, 674
and oxygen uptake in cardiomegaly, 339
pulmonary, in children with cystic fibrosis, 494
regional cerebral, effects of Pa_{CO_2} on, during carotid clamping, 510
gas tensions in chronic obstructive lung disease, effect of ultrasonic nebulization on, 665
-pressure responses to d-tubocurarine and its preservatives in anesthetized patients, 505
samples, filter paper, used in serological studies of respiratory virus infections in children, 666
supply, anomalous, congenital cystic adenomatoid malformation with, 514
volume, residual placental, and perinatal asphyxia, 512
Blunt trauma, laceration of lung following, 342
Bochdalek diaphragmatic hernia associated with high renal ectopia, 877
Breath
sensation of holding, role of diaphragm in, 869
sounds, 509
Breathing
ability of man to detect resistive loads to, 665
effect of lung deflation on, 511
Bronchiectasis in young children, 665
Bronchiolitis obliterans in young children, 665
Bronchitis
chronic
bronchopulmonary lavage in, 337
double-blind cross-over trial of trimethoprim-sulfamethoxazole in, 493
left ventricle in, 326
smoking, and lung cancer, 168
in men employed in coke industry, 866
role of, in electrocardiogram in chronic airways obstruction, 661
Bronchoconstriction induced by cycling and running, comparison of, 510
Bronchography. *See* Roentgenology
Bronchoscopy
diagnostic, bronchospirometry during, 674
and *M. tuberculosis*, 515
Bronchospirometry during diagnostic bronchoscopy, 674
Bronchus, granuloma in, 332
Butanol as carbon source in differentiation of *M. avium* and *M. intracellulare*, 169
Byssinosis, aetiology of, 496
Cadmium
ion, interference of, with oxidative metabolism of alveolar macrophage, 172
tissue, in emphysema and bronchogenic carcinoma, 503
Caisson workers, decompression sickness in, 876
CAMP. *See* Cyclic 3′,5′-adenosine monophosphate
Cancer. *See also* Tumors, carcinoma
immunotherapy of, 334
lung
with asthmatic signs, 870
false diagnoses in patients with, 870
morbidity and mortality in Sweden, 664
prognosis of, 502, 676
radical radiation therapy for, 674
smoking, and chronic bronchitis, 168
registration, lung, completeness and reliability of, in Swedish cancer registry, 332
Candida, in vitro experiments with new antimycotic from Bay b 5097 and strains of, 330
Canine. *See* Dog(s)
Capsulation of pneumococcus with soluble cell wall-like polysaccharide, 501
Carbenicillin

or sulfamethoxazole combined with colistin, susceptibility of *Pseudomonas aeruginosa* to, 325
therapy of severe *Pseudomonas aeruginosa* infections, 492
Carbon dioxide
breathing, respiratory and haemodynamic response to, in patients with and without bronchial obstruction, 672
ventilatory response to, during recovery from severe asthma, 511
Carbon disulfide poisoning, 866
psychological picture of manifest and latent, 868
Carbon monoxide, mortality caused by air polluted with, 328
Carcinoma. *See* Tumors
Cardiomegaly, myocardial blood flow and oxygen uptake in, 339
Cardiac. *See* Heart
Carotid
body
autoregulation of blood flow in, 875
chemoreceptors, responses of, in cat to sudden changes of hypercapnic and hypoxic stimuli, 873
clamping, effects of Pa_{CO_2} on regional cerebral blood flow and internal carotid arterial pressure during, 510
Cat, responses of carotid body chemoreceptors in, to sudden changes of hypercapnic and hypoxic stimuli, 873
Catheterization, right heart, in preoperative evaluation of patients with chronic bronchial and pulmonary disease, 515
Cell wall and soluble cell wall-like polysaccharides, nonidentity of, 501
Chemoprophlaxis
trial in India against tuberculosis, feasibility of, 325
of tuberculosis, 176
logistics of, 669, 670
Chemoreceptors, carotid body, responses of, in cat to sudden changes of hypercapnic and hypoxic stimuli, 873
Chemotherapy. *See also* Drugs and individual drugs
antituberculosis, *in vitro* under various conditions inadequate for growth of tubercle bacilli, 862
intermittent of pulmonary tuberculosis, 862
Chest
disease, chronic, relation between sputum sol phase composition and, 500
of rabbit, effects of therapeutic proton doses on, 341
radiographic appearance of, following thal procedure, 343
stomach in, 343
wall tumors, 332
X-ray surveys in Australia, community-wide, 507
Chick allantoic glycopeptide sulfate, antibody-combining oligosaccharides from, associated with influenza virus hemagglutinin, 330
Children. *See also* Infants
ages six to eleven years, prevalence of wheezing and other respiratory symptoms in, from Perth, Western Australia, 869
asthmatic, disodium cromoglycate in treatment of, 496
atypical mycobacterial infections in, 678
bronchiolitis obliterans, bronchiectasis, and other sequelae of adenovirus type 21 infection in, 665
with cystic fibrosis, distribution of pulmonary blood flow in, 494
filter paper blood samples used in serological studies of respiratory virus infections in, 666
idiopathic pulmonary hypertension in, 338
new pathological findings in empysema of, 327
normal, cardio-respiratory response to exercise in, 509
rapid diagnosis of respiratory syncytial virus infection in, by immunofluorescent technique, 869
simplified organ culture of human embryo trachea in diagnosis of viral respiratory disease of, 872
tuberculosis casefinding by tuberculin testing among, 671
Chlorine
compounds, organic, excretion of, in urine of persons exposed to vapours of trichloroethylene and tetrachloroethylene, 867
exposure, acute, clinical, roentgenologic, and physiologic effects of, 167
Cigarettes. *See* Smoking
Ciliary activity in tracheobronchial tree of rats, 333
Circulation
lesser, in pulmonary fibrosis secondary to sarcoidosis and its relationship to respiratory function, 661
pulmonary, and fulvine, 506
Circulatory
adjustments during severe chronic anemia, 337
effects of peridural block, 173

Cirrhosis
hepatic, regional lung function in patients with, 876
muscular, of lung in pneumoconiosis, 167
Clotting, disseminated intravascular, complicating viral pneumonia due to influenza, 669
Coagulation, disseminated intravascular, nonbacterial thrombotic endocarditis and adult pulmonary hyaline membranes, 507
Coal miners
hyperinflation of lungs in, 878
respiratory incapacity in, of New South Wales, 866
Coke industry, bronchitis in men employed in, 866
Colistin combined with carbenicillin or sulfamethoxazole, susceptibility of *Pseudomonas aeruginosa* to, 325
Computer and tuberculosis, 516
Contraceptive, oral, screening for heterozygous alpha$_1$-antitrypsin deficiency with diethylstilbestrol and effect of, 870
Copper and iron values in sera of patients with bronchogenic carcinoma, 332
Cordotomy, cervical, respiratory function after, 340
Cotton and jute workers, female, respiratory function in nonsmoking, 866
Cryptococcus, in vitro experiments with new antimycotic from Bay b 7097 and strains of, 330
Cyclic 3',5'-adenosine monophosphate, modulation by agents influencing cellular levels of, 499
Cycling, bronchoconstriction induced by, 510
Cysts
parathyroid, of mediastinum, 879
peripheral bronchial, in one lung, tuberculosis in the other, 347
pulmonary hydatid, surgery of, 880
Cytodiagnosis of rheumatoid pleural effusions, 666
Dead space and cardiac output on exercise, effect of arterial Pco_2 on, 178
Decompression sickness in caisson workers, 876
Dialysis, peritoneal, effect of, on pulmonary function, 327
Diaphragm, role of, in sensation of holding breath, 869
Diazepam prevents local anesthetic seizures, 174
Diethylstilbestrol, screening with, for heterozygous alpha$_1$-antitrypsin deficiency, and effect of oral contraceptives, 870
Dipalmitoyl lecithin, synthesis of, by alveolar macrophages, 873
Dirofilariasis, pulmonary
in Queensland, 871
in Western Australia, 875
Disability and patients perceptions of preferential treatment, 662
Disodium cromoglycate in treatment of asthmatic children, 496
Diverticulum, oesophageal, spontaneous rupture of, 880
DNA binding vs hydroxylation, 167
Dog(s)
arrthymic doses of epinephrine during forane, halothane and fluroxene anesthesia in, 173
conscious, effect of acute pulmonary embolism on coronary dynamics in, 872
lung allotransplantation, bilateral simultaneous, 342
normal and with myocardial infarction, effect of inhalation of cigarette smoke on fibrillation threshold in, 874
Double-blind
cross-over trial of trimethoprim-sulfamethoxazole in chronic bronchitis, 493
study to determine maximum tolerated dose of ethionamide, 324
Drug(s)
antituberculous, in combination with rifampin, 164
bronchodilator, metered aerosid of, 496
free, for treatment of tuberculosis, 508
resistance
primary, of tubercle bacilli isolated from previously untreated tuberculous patients, 164
in retreatment of severe cavitary pulmonary tuberculosis with rifampicin, 863
Dust content of lungs of workers exposed to fiber glass, 167
Dying, care and management of the, 325
Dysautonomia, acquired, abnormal respiratory control in, 337
East Indian adults in Guyana, respiratory disease among, 499
Ectopia, high renal, associated with Bochdalek diaphragmatic hernia, 877
Edema
cardiogenic pulmonary, acute reversible respiratory acidosis in, 177
pulmonary
complicating intrathecal hypertonic saline injection for intractable pain, 879
methadone induced, 874
and rigidity after innovar in a patient on

levodopa therapy, 874
Effusion(s)
acute and chronic pericardial, treated by subxiphoid pericardial window, 343
rheumatoid pleural, cytodiagnosis of, 666
pericardial, 327
pleural, shoulder-hand syndrome following, 347
Electrocardiogram
in chronic airways obstruction, 661
in emphysema with and without chronic airways obstruction, 661
Electrolyte changes in acute respiratory alkalosis, 338
Electron microscopic study of primary pulmonary histiocytosis X, 339
Embolectomy
pulmonary, using normothermic venous inflow occlusion, 515
transvenous pulmonary, by catheter device, 880
Emboli, pulmonary, in small vessels, wedge arteriography for identification of, 673
Embolism, acute pulmonary
effect of, on coronary dynamics in conscious dog, 872
pathophysiology and experimental treatment of, 873
Emphysema
of childhood, new pathological findings in, 327
chronic pulmonary, right and left ventricular hypertrophy in, 864
compensatory, of contralateral lung, 327
complicated with spontaneous pneumothorax, 336
electrocardiogram in, with and without chronic airways obstruction, 661
hereditary, pathophysiology of, 170
left ventricle in, 326
obstructive, pulmonary function studies in, 327
role of, in electrocardiogram in chronic airways obstruction, 661
13th annual Aspen conference on, 326
tissue cadmium and zinc content in, 503
unilateral congenital, with hypoplasia, 327
Empyema
postpneumonectomy, in pulmonary carcinoma patients, 514
in rheumatoid pleuropulmonary disease, 175
tuberculous, pathologic study on, 871
Endaortitis, *Aspergillus flavus*, following aortic valvotomy, 513
Endocarditis, nonbacterial thrombotic, disseminated intravascular coagulation and adult pulmonary hyaline membranes, 507
Endocrine cells in bronchial mucosa of human fetuses, 338
Endometrium, tuberculosis of, 345
End-tidal anesthetic partial pressure as accurate measure of arterial anesthetic partial pressure, 506
Engström respirator, variable-deadspace device for use with, 178
Epidemiology
of hemoptysis, 328
of sarcoidosis, characteristics of, 664
Epilepsy in cardiopulmonary bypass patients receiving large intravenous doses of penicillin, 335
Epinephrine
arrhythmic doses of, during forane, halothane and fluroxene anesthesia in dogs, 173
effects of, on peridural block, 173
Epithelium, rat airway, effect of extremes of temperatures humidity on goblet cell count in, 872
Erythromycin estolate and erythromycin stearate, comparison of absorption after oral administration of, 874
Es-2 marker of mice, studies of stem cells using, 172
Ethambutol
intravenous administration of, in pulmonary tuberculosis, 180
—rifampicin in retreatment of pulmonary tuberculosis, 492
and rifampin treatment, results of, 863
Ether, effects of, on apneic thresholds in man, 174
Ethionamide
double-blind study to determine maximum tolerated dose of, 324
hepatotoxic effect of, 492
hypoglycemia in case treated with, 335
Ethylene, removal of, by soil, 663
Exercise
cardio-respiratory response to, in normal children, 509
effect of arterial Pco_2 on calculated values of cardiac output and dead space on, 178
treadmill, cardio-respiratory response to, in normal children, 510
Expiratory volume, forced, peak flow rate in relation to, in hemp workers, 498
Family, economic impact of cystic fibrosis on, 336

Farmer's lung, immunofluorescent studies in patients with, 871
Fetus, aborted, T-strains of mycoplasma in bronchopneumonic lungs of, 669
Fiber glass, lungs of workers exposed to, 167
Fibrillation threshold, ventricular, effect of inhalation of cigarette smoke on, in normal dogs and dogs with myocardial infarction, 874
Fibrosis
  chronic idiopathic pulmonary hilar, 494
  cystic
    distribution of pulmonary blood flow in children with, 494
    and economic impact upon family, 336
  diffuse pulmonary, and hiatus hernia, 494
  pulmonary, lesser circulation in, secondary to sarcoidosis and its relationship to respiratory function, 661
Fistula
  arteriovenous, of internal mammary vessels, 878
  pulmonary artery, traumatic aorta to, 344
Flora, bacterial and fungal, of seagull droppings in Jersey, 663
Flow rate, peak, in relation to forced expiratory volume in hemp workers, 498
Fluroxene anesthesia in dogs, arrhythmic doses of epinephrine during, 173
Forane
  anethesia in dogs, arrhythmic doses of epinephrine during, 173
  effects of, on apneic thresholds in man, 174
  ventilatory effects of, 174
Fulvine and pulmonary circulation, 506
Fungus balls. *See* Tumors, mycetomas
Gangrene, lung, use of sodium cephalothin in management of, 880
Gas
  exchange, effect of oxygen administration on, in normal subjects, 511
  transfer sickle-cell anaemia and lung volumes, assessment of, 509
Goblet cell count, effect of extremes of temperatures and humidity on, in rat airway epithelium, 872
Goodpasture's syndrome, recovery from severe pulmonary hemorrhage after bilateral nephrectomy in, 326
Granuloma. *See* Tumors
Guyana, respiratory disease among East Indian and African adults in, 499
Haemodynamic and respiratory response to carbon dioxide breathing in patients with and without bronchial obstruction, 672
Halothane
  anesthesia in dogs, arrhythmic doses of epinephrine during, 173
  effects of, on apneic thresholds in man, 174
  —nitrous oxide anesthesia, cardiovascular effects of, 506
Hamartoma. *See* Tumors
Heart
  cardiac
    failure, occult, following myocardial infarction, radiological detection of, 341
  output and dead space on exercise, effect of arterial P_{CO_2} on, 178
  cardiopulmonary
    bypass patients receiving large intravenous doses of penicillin, epilepsy in, 335
    function, effect of oxygen administration on, in normal subjects, 511
  cardio-respiratory response
    to exercise in normal children, 509
    to treadmill exercise in normal children, 510
  coronary dynamics, effect of acute pulmonary embolism on, in conscious dog, 872
  disease
    ischemic, oxygen in, 511
    pulmonary, in Ibadan, 495
  failure, pulmonary, controlled oxygen therapy and, 865
  screening in Newark model cities area, 177
Helium ion beam, 910 MeV, biologic effectiveness and oxygen enhancement ratio at various depths of, 674
Helsinki, *Mycoplasma pneumoniae* pneumonia in, epidemic pattern and autoimmune manifestations, 336
Hemagglutinin, influenza virus, antibody-combining oligosaccharides from a chick allantoic glycopeptide sulfate associated with, 330
Hemophilus influenza
  human serum activities against, 872
  type b, capsular antigen of, immunization of humans with polyribophosphate, 869
Hemoptysis, epidemiology of, 328
Hemorrhage
  intrapulmonary, with anemia after lymphography, 878
  pulmonary, after bilateral nephrectomy in Goodpasture's syndrome, 326
Hepatitis with icterus in course of treatments with isoniazid-rifampin, 335
Hernia

Bochdalek diaphragmatic, associated with high renal ectopia, 877
hiatus, and diffuse pulmonary fibrosis, 494
Hippuric acid, excretion of, and m- or p-methylhippuric acid in urine of persons exposed to vapours of toluene and m- or p-xylene, 867
Histamine and slow-reacting substance of anaphylaxis, immunological release of, from human lung, 499
Histiocytosis X, primary pulmonary, electron microscopic study of, 339
Hodgkin's disease
combined clinical and histological assessment of survival of patients with, 666
mantle treatment of, 342
Homotransplantation, lung, in man, 179
Hong Kong influenza and pneumonia, 176
Hormone, growth, influence of excess, on postnatal growth of mammalian lung, 505
Hospital(s)
age, racial, occupational, geographical, clinical, and survivorship characteristics in epidemiology of sarcoidosis, 664
charity, asthma admission rates, 499
Pseudomonas aeruginosa in distilled water from, 664
House dust allergy asthma, hyposensitization in, 166
Hyaline membranes, adult pulmonary, disseminated intravascular coagulation and nonbacterial thrombotic endocarditis, 507
Hydatid disease of lung, 675
Hydroxylation vs DNA binding, 167
Hypercapnia in primary metabolic alkalosis, 177
Hyperinflation of lungs in coal miners, 878
Hyperplasia, autonomous parathyroid, and sarcoidosis, 667
Hypersensitivity
in vivo delayed-type, correlated with *in vitro* lymphocyte transformation in sarcoidosis, 668
streptomycin, 165
Hypersensitization in house dust allergy asthma, 166
Hypertension
idiopathic pulmonary, in infancy and childhood, 338
primary vascular pulmonary, lung scan in, 673
pulmonary, reconsideration of origins of, 339
Hypertrophy, right and left ventricular, in chronic pulmonary emphysema, 864
Hypoglycemia in case treated with ethionamide, 335
Hypoplasia with unilateral congenital emphysema, 327
Hypoventilation, compensatory, and hypercapnia in primary metabolic alkalosis, 177
Hypoxia
effects of, on myocardial blood flow and oxygen consumption, 674
prevention of, during endoctracheal suction, 343
progressive, venous oxygenation during, 338
Hysteresis, compliance, geometric irreversibility and, in lung, 876
Ibadan, pulmonary heart disease in, 495
Icterus
with hepatitis in course of treatments with isoniazid-rifampin, 335
and transaminase, increase in, during rifampin-isoniazid treatment, 164
Illinois, University of, antismoking education study at, 669
Immigrants, young male, in Stockholm, health control of, 337
Immunity, cell-mediated, and antibody responses in respiratory tract after local and systemic immunization, 504
Immunization
of humans with polyribophosphate, capsular antigen of *Hemophilus influenza* type b, 869
local and systemic, cell-mediated immunity and antibody responses in respiratory tract after, 504
Immunofluorescent technique
rapid diagnosis of respiratory syncytial virus infection in children by, 869
in studies of patients with farmer's lung, 871
Immunoglobulin levels in sarcoidosis, 667
Immunotherapy of cancer, 334
Implantation, radioactive gold, in treatment of peripheral bronchial carcinoma, 513
India
feasibility of chemoprophylaxis trial against tuberculosis in, 325
1971-80, programme for control of pulmonary tuberculosis, 671
Indian freeze dried BCG vaccine, 670
Infants. *See also* Children
and children, para-influenza virus infection

, in respiratory illnesses of, 348
humidification during positive-pressure ventilation of, 865
newborn
artificial ventilation in respiratory failure in, 672
management of respiratory problems in, 672
and ratio air-to-fluid in lungs, 512
ventilation mechanics of, 340
Infarction, myocardial
effect of inhalation of cigarette smoke on ventricular fibrillation threshold in normal dogs and dogs with, 874
radiological detection of occult cardiac failure following, 341
Infection(s)
alteration of pulmonary compliance during, 334
atypical mycobacterial, in children, 678
pulmonary, with strain of atypical mycobacteria with changing color of colonies, 666
respiratory
syncytial virus, rapid diagnosis of, by immunofluorescent technique, in children, 869
virus, filter paper blood samples used in serological studies of, in children, 666
severe *Pseudomonas aeruginosa*, carbenicillin therapy of, 492
tuberculosis, and disease in clusters of rural households, 328
Influenza
A2/Hong Kong/68 pneumonia, clinicopathological features in fatal cases of, 669
disseminated intravascular clotting complicating viral pneumonia due to, 669
Hong Kong, and pneumonia, 176
in Los Angeles county, 664
in pregnancy causes malformations, further tests of hypothesis that, 868
vaccine, single dose monovalent A2/Hong Kong, efficacy 14 months after immunization, 875
viraemia in, 875
virus
hemagglutinin, antibody-combining oligosaccharides from a chick allantoic glycopeptide sulfate associated with, 330
pneumonitis, 874
Inflow, venous, directional transcutaneous assessment of, 338
Infusion test, rapid intravenous calcium, in sarcoidosis, 339
Inhalation
of acetylene gas, pneumonia caused by, 507
chronic, of bis (chlormethyl) ether induction of lung adenomas by, 171
single-breath oxygen, method of detecting abnormal unevenness of alveloar ventilation by, 877
tantalum, bronchography by, 877
Innovar, rigidity and pulmonary edema after, in patient on levodopa therapy, 874
Intubation
endotracheal, with assisted respiration, laryngotracheal obstruction complicating, 879
pleural space, antibiotic therapy following, 179
Iron and copper values in sera of patients with bronchogenic carcinoma, 332
Irradiation. *See* Radiation therapy
Isoniazid
influence of, on naturally acquired tuberculin allergy, 329
prophylaxis re-examined, 516
-rifampin
hepatitis with icterus in course of treatments with, 335
in treatment of pulmonary tuberculosis, 324
treatment, increase in transaminase and icterus during, 164
serum, rapid microbiological determination of, 493
Japan, mortality rate of tuberculosis in, 177
Jaundice, obstructive, due to tuberculous lymph nodes compressing common bile duct, 677
Jersey, England, bacterial and fungal flora of seagull droppings in, 663
Jute and cotton workers, female, respiratory function in nonsmoking, 866
Kanamycin, pulmonary tuberculosis without kanamycin-tubercle bacilli despite a long-term administration of, 862
Korea, primary drug-resistance of tubercle bacilli isolated from previously untreated tuberculous patients in, 164
Kyphoscoliosis, ventilation perfusion relationship following correction of, 672
Laryngoscope, ventilating, 880
Larynx, carcinoma of, treated by ^{60}Co supervoltage irradiation, 341
Lateral position test in study of separate functions of lungs, 339

Lavage, bronchopulmonary, in asthma and chronic bronchitis, 337
Left ventricle in chronic bronchitis and emphysema, 326
Left ventricular
function in chronic obstructive lung disease, 326
performance in chronic obstructive lung disease, 495
Lesions
bacillary content of, from resected tuberculous lungs, 333
coin, surgically managed, 515
neoplastic and inflammatory, gallium 67 citrate scanning in, 341
tubercular, pulmonary complication of amoebic liver abscess which exaggerated, in lung, 677
Leucocyte migration, peripheral, micro-method for, in tuberculin sensitivity, 872
Levodopa therapy, rigidity and pulmonary edema after innovar in patient on, 874
Ligation, immediate right pulmonary artery, with left lung replantation, 342
Lividomycin
antituberculosis activity of, 324
in vitro, antituberculous activity of, 870
Lobe, normal, overinflation of, in emphysema of childhood, 327
Los Angeles county, 1968-69, influenza in, 664
Lung(s)
absorption of phenol vapour in, 665
adenomas, induction of, by chronic inhalation of bis (chloromethyl) ether, 171
allotransplantation, bilateral simultaneous canine, 342
amyloid, 493
of bird owners, allergic reactions in, 513
bronchopneumonic, T-strains of mycoplasma in, of aborted fetus, 669
cancer
with asthmatic signs, 870
morbidity and mortality in Sweden, 664
patients and false diagnoses, 870
prognosis of, 502, 676
radical radiation therapy for, 674
registration, completeness and reliability of, in Swedish cancer registry, 332
smoking, and chronic bronchitis, 168
capillary permeability, 172
carcinoma, metastatic, associated with spontaneous pneumothorax, 332
contralateral, compensatory emphysema of, 327
deflation, effect of, on breathing, 511
disease, chronic obstructive
effect of ultrasonic nebulization on blood gas tensions in, 665
left ventricular function in, 326
in opium smokers in Singapore, 864
right and left ventricular performance in, 495
and smoking in alpha$_1$-antitrypsin deficiency, 662
treatment of acute respiratory acidosis in, 663
hardly diagnosable, 870
fields, upper and lower, comparison of pathological changes in, by means of selective alveo-bronchography, 878
function
lateral position test in studying, 339
regional, in patients with hepatic cirrhosis, 876
in sarcoidosis, 510
gangrene, use of sodium cephalothin in management of, 880
geometric irreversibility and compliance hysteresis in, 876
human
immunological release of histamine and slow-reacting substance of anaphylaxis from, 499
phospholipid content and pathologic changes in, 333
homotransplantation in man, 179
hydatid disease of, 675
hyperinflation of, in coal miners, 878
involvement in polymyositis, 494
laceration of, following blunt trauma, 342
left, amebiasis of, 661
low temperature combusion on cigarette smoke damage to, 504
mammalian, postnatal growth of, 505
mechanics during provocation of asthma, 511
metastasis and malignant tumor, 170
muscular cirrhosis of, in pneumoconiosis, 167
mycetomas, treatment of, by intracavitary suction and local washing with amphotericin B, 165
overdistension of, after pneumonectomy in patients with pulmonary tuberculosis, 673
pathology in respiratory distress following shock in adults, 667
of persons in New York City, chrysotile asbestos in, 166
phantom tumors of, differential diagnosis of, 340
proton irradiation of pulmonary tissue and

Vx2 carcinoma in, of rabbit, 673
rat
effects of nitrogen dioxide on cell renewal in, 171
electron microscopic studies of, 334
ultrastructural changes in connective tissue in, exposed to NO_2, 172
ratio air-to-fluid in, of newborn infants, 512
replantation, left, with immediate right pulmonary artery ligation, 342
resected tuberculous, bacillary content of lesions from, 333
scan in primary vascular pulmonary hypertension, 673
shock, genesis of, 865
single, pulmonary aplasia and quantitative analysis of development of, 871
syndrome, unilateral hyperlucent, as feature of chronic pulmonary artery thrombosis, 165
tissue and serum levels of methacycline, 862
tubercular lesions in, pulmonary complication of amoebic liver abscess which exaggerated, 677
tuberculosis
in one, peripheral bronchial cysts in the other, 347
suspected, 348
volumes
and gas transfer sickle-cell anaemia, assessment of, 509
static and dynamic, and ventilation-perfusion abnormality in adult asthma, 877
Wegener granulomatosis of, 165
of workers exposed to fiber glass, 167
Lymph nodes, tuberculous, obstructive jaundice due to, compressing common bile duct, 677
Lymphocyte transformation, *in vitro* correlated with *in vivo* delayed-type hypersensitivity in sarcoidosis, 668
Lymphography. *See* Roentgenology
Lymphoma. *See* Tumors
Lysosomes, fusion of, with phagosomes, 504
Macrophage(s)
alveolar
interference of cadmium ion and oxidative metabolism of, 172
in vitro studies of morphologic and functional characteristics, 334
synthesis of dipalmitoyl lecithin by, 873
cultured, response to *M. tuberculosis,* 504
pulmonary alveolar
associated with magnesium ion adenosine triphosphatase system, 173
origin of, 172
Magnesium ion adenosine triphosphatase system associated with pulmonary alveolar macrophage, 173
Mantle field and treatment. *See* Roentgenology
Mantoux method compared with jet injector tuberculin skin testing, 671
Mastitis, tuberculous, 677
Mauna Loa, Hawaii, absence of air pollution trends at, 328
Mediastinitis, fibrous, presenting as mitral stenosis, 342
Mediastinoscopy, critical evaluation of, 879
Mediastinum, parathyroid cyst of, 879
Melioidosis, chronic or latent, 871
Meningitis
acute bacterial, in Stockholm, 677
tuberculous, in adults, 344
Merthiolate as a perservative, intracutaneous test reactions to tuberculin containing, 670
Metabolism, oxidative, of alveolar macrophage, interference of cadmium ion with, 172
Metastasis, lung, and malignant tumor, 170
Metastatic ocular deposits due to bronchial carcinoma, 502
Methacycline, lung tissue and serum levels of, 862
Methadone induced pulmonary edema, 874
Methoxyflurane
chronic exposure to, 166
metabolism and renal dysfunction, 506
Methylhippuric acid, m- or p-, and hippuric acid, excretion of, in urine of persons exposed to vapours of toluene and m- or p-xylene, 867
Mice
evaluation of streptomycin-isoniazid-ethambutol combination in primary treatment of pulmonary tuberculosis in, 668
neonatal and adult, behavior of attenuated mycobacteria in organs of, 503
studies of stem cells using the es-2 marker, of, 172
Microscopy
fluorescence, nonculturable tubercle bacilli seen on, 500
sputum, diagnosis of pulmonary tuberculosis by, 345
Minnesota, Olmsted country, 30-year trend of bronchogenic carcinoma in, 501
Morphology
of alveolar surface, 330
bronchial, methods for quantitating, 503

Mortality of insulation workers in Belfast, 497
Mountain sickness, acute, in the Peruvian Andes, 499
Mucosa, bronchial, endocrine cells in, of human fetuses, 338
Mycetoma. *See* Tumors
Mycobacteria
  atypical, strain of, in pulmonary infection, with changing color of colonies, 666
  attenuated, in organs of neonatal and adult mice, behavior of, 503
  in menstrual blood of tuberculous women, 171
Mycobacterial disease, epidemiological survey of, in New South Wales, 168
Mycobacterium, pseudolysogenic, and review of literature concerning pseudolysogeny, 331
Mycobacterium
  avium and *M. intracellulare*, differentiation of, by utilization of butanol as carbon source, 169
  bovis, living, regression of tumors after intralesional injection of, 334
  tuberculosis
    and bronchoscopy, 515
    measures of sensitivity of, to pyrazinamide, 331
    response of cultured macrophages to, 504
  xenopei, pulmonary and pleural disease due to, 517
Mycoplasma, T-strains of, in bronchopneumonic lungs of aborted fetus, 669
Narcotic addicts and problems of infectious disease, 329
Nasopharynx, carcinoma of, 331
N-demethylstreptomycin 3, antibacterial activity of, 325
Nebulization, ultrasonic, effect of, on blood gas tensions in chronic obstructive lung disease, 665
Necrosis, fat, pericardial cysts and tumors, 514
Neoplasms. *See* Tumors
Neoplastic disease complicated by *Nocardia asteroides*, 169
Nephrectomy, bilateral, in Goodpasture's syndrome, recovery from severe pulmonary hemorrhage after, 326
Neuromuscular disease, respiratory failure in, 876
New Orleans asthma, 499
New South Wales
  epidemiological survey of mycobacterial disease in, 168
  respiratory incapacity in coal mine workers of, 866
Newark model cities area, heart screening in, 177
New York City, chrysotile asbestos in lungs of persons in, 166
Nigeria, peak flow rate in, 876
Nigerians, healthy adult, ventilatory function in, 673
Nitrogen dioxide
  effects of, on cell renewal in rat lung, 171
  exposure and leakage of tritiated serum, 172
  removal of, by soil, 663
  role of, in development of respiratory diseases in man, 663
Nocardia asteroides infection complicating neoplastic disease, 169
Nursing home use, misuse and nonuse, 176
Occlusion, normothermic venous inflow, pulmonary embolectomy using, 515
Oedema, pulmonary, following exposure to trichlorethylene, 499
Okinawa, tuberculosis in, epidemiological analysis of, 499
Oligosaccharides, antibody-combining, from a chick allantoic glycopeptide sulfate associated with influenza virus hemagglutinin, 330
Opium smokers, lung disease with chronic obstruction in, in Singapore, 864
Osteoarthropathy, hypertrophic pulmonary, with primary intrapulmonary neurogenic sarcoma, 332
Ototoxicity
  due to streptoduocin, 660
  of thiacetazone, 335
Oxide, nitrous, and halothane anesthesia, cardiovascular effects of, 506
Oxygen
  administration, effect of, on gas exchange and cardiopulmonary function in normal subjects, 511
  consumption, effects of hypoxia on, 674
  enhancement ratio and relative biologic effectiveness at various depths of 910 MeV helium ion beam, 674
  inhalation, single-breath, method of detecting abnormal unevenness of alveolar ventilation by, 877
  in ischemic heart disease, 511
  tension estimation, continuous arterial, from measured palpebral conjuntival oxygen tension, 514
  therapy
    continuous, in chronic airway obstruction, 662
    controlled, and pulmonary heart failure, 865

uptake and myocardial blood flow in cardiomegaly, 339
Oxygenation, venous, during progressive hypoxia, 338
Pa_{CO_2}, effects of, on regional cerebral blood flow and internal carotid arterial pressure during carotid clamping, 510
Pancuronium, neuromuscular pharmacology of, 173
Paper electrophoretic studies of serum proteins in pulmonary tuberculosis in Rejasthan, 330
Para-influenza virus infection in respiratory illnesses of infants and children, 348
Paraquat, nail damage to spray operators exposed to, 867
Parasites, intestinal, absence of, in asthma, 169
Penicillin
aluminum monostearate, crystalline, in treatment of pneumonia, 507
epilepsy in cardiopulmonary bypass patients receiving large intravenous doses of, 335
Perforation of aorta due to tuberculosis, 170
Perfusion, ventilation, relationship following correction of kyphoscoliosis, 672
Pericardial
cysts, tumors and fat necrosis, 514
window, subxiphoid, in treatment of acute and chronic pericardial effusions, 343
Pericardiectomy for recurrent pericarditis, 675
Pericarditis, recurrent, pericardiectomy for, 675
Peridural block, circulatory effects of, and epinephrine, 173
Peritonitis, tuberculous, presenting as ascites, 515
Peruvian Andes, acute mountain sickness in, 499
Phagosomes, fusion of, with lysosomes, 504
Pharmacology, neuromuscular, of pancuronium, 173
Phenol, exposure to, 665
Philadelphia pulmonary neoplasm research project, 502
Phospholipid content and pathologic changes in human lung, 333
Phrenic nerves, transvenous stimulation of, 873
Physician associates and assistants, critical issues in use of, 508
Plaques, parietal pleural, pathology of, 667
Plasma volume expanders, natural and artificial, and wet-lung syndrome, 496
Pleural disease due to *Mycobacterium xenopei*, 517
Pneumococcus, capsulation of, with soluble cell wall-like polysaccharide, 501
Pneumoconiosis
research, poly (vinylpyridine oxides) in, 504
simple, elaboration of small opacity types in, 497
talc, 170
Pneumonectomy, overdistension of lung after, in patients with pulmonary tuberculosis, 673
Pneumonia
bacteremic *Haemophilus influenzae*, associated with typable strains, 175
caused by inhalation of acetylene gas, 507
epidemic mycoplasma, 336
fatal varicella, 180
and Hong Kong influenza, 176
influenza A2/Hong Kong/68, clinico-pathological features in fatal cases of, 669
Mycoplasma pneumoniae, in Helsinki, 1962-70, 336
treatment of, in New Guinea, 507
viral, disseminated intravascular clotting complicating, due to influenza, 669
Pneumonitis, influenza virus, 874
Pneumotachography by ionization principle, 512
Pneumothorax, spontaneous
emphysema complicated with, 336
metastatic carcinoma lung associated with, 332
in young subjects, 507
Pollen, semiquantitative, and charity hospital asthma admission rates, 499
Pollution control, some political characteristics of, 337
Polymyositis, lung involvement in, 494
Polyribophosphate, capsular antigen of *Hemophilus influenza* type b, immunization of humans with, 869
Polysaccharide, soluble cell wall-like, capsulation of pneumococcus with, 501
Poly(vinylpyridine oxides) in pneumoconiosis research, 504
Postpneumonectomy empyema in pulmonary carcinoma patients, 514
Potassium ion, sodium ion, and magnesium ion adenosine triphosphatase system associated with pulmonary alveolar macrophage, 173
Precipitin reactions in *Serratia marcescens* bacteremia, 330
Pregnancy, further tests of hypothesis that influenza causes malformations during, 868
Pressure

end-tidal anesthetic partial, as accurate measure of arterial anesthetic partial pressure, 506
internal carotid arterial and regional cerebral blood flow, effects of Pa_{CO_2} on, during carotid clamping, 510
Prothionamide, hepatotoxic effect of, 492
Proton doses, therapeutic, effects of, on healthy organs in neck, chest, and upper abdomen of rabbit, 341
Pseudolysogeny, literature concerning, and pseudolysogenic mycobacterium, 331
Pseudomonas aeruginosa
in distilled water from hospitals, 664
severe, carbenicillin therapy of, 492
susceptibility of, to colistin combined with carbenicillin or sulfamethoxazole, 325
Pulmonary. *See also* Lung(s)
compliance, alteration during infection, 334
complication of amoebic liver abscess which exaggerated tubercular lesions in lung, 677
cripple, rehabilitation of, 864
disease(s)
chronic, 864
in patients living at sea level and at altitude of 1,000 meters, 178
right heart catheterization in preoperative evaluation of patients with, 515
obstructive, application of computerized respirator to patients with, 865
obstructive, spinal and general anesthesia for lower abdominal surgery in patients with, 514
due to *Mycobacterium xenopei*, 517
nontuberculous, admitted to tuberculosis hospital in last 15 years, 508
obstructive, mass examination of aged people with emphasis on, 508
rheumatoid pleuro-, empyema in, 175
function
in chronic obstructive pulmonary disease, regional evaluation of, 179
effect of peritoneal dialysis on, 327
new test of, 672
at rest and during exercise following bagassosis, 498
studies in obstructive emphysema, 327
Pyrazinamide, measures of sensitivity of *M. tuberculosis* to, 331
Quebec, mortality in the chrysotile asbestos mines and mills of, 167
Quinoline derivatives, synthetic, anti-histaminic activity of, 505
Rabbit
neck, chest and upper abdomen of, effects of therapeutic proton doses on, 341
proton irradiation of pulmonary tissue and Vx2 carcinoma in lung of, 673
Radiation therapy
irradiation
proton, of pulmonary tissue and Vx2 carcinoma in lung of rabbit, 673
^{60}Co supervoltage, in treatment of carcinoma of larynx, 341
radical for cancer of lung, 674
Rat(s)
airway epithelium, effect of extremes of temperatures and humidity on goblet cell count in, 872
exposed to NO_2, ultrastructural changes in connective tissue in lungs of, 172
lung, effects of nitrogen dioxide on cell renewal in, 171
lungs, electron microscopic studies of, 334
tracheobronchial tree of, ciliary activity in, 333
Rajasthan, paper electrophoretic studies of serum proteins in pulmonary tuberculosis in, 330
Renal
dysfunction and methoxyflurane metabolism, 506
failure
posttraumatic acute, complicated by respiratory failure, 340
tetracycline toxicity in, 506
Resection for bronchogenic carcinoma, 515
Respirator
computerized, application of, to patients with chronic obstructive pulmonary disease, 865
Engström, variable-deadspace device for use with, 178
Respiratory
adjustments during severe chronic anemia, 337
control, abnormal, in acquired dysautonomia, 337
disease(s)
among East Indian and African adults in Guyana, 499
in Australian morbidity survey, 869
in man, role of nitrogen dioxide in development of, 663
new approach to treatment of, 662
viral, simplified organ cultures of human embryo trachea in diagnosis of, in children, 872
distress
following shock in adults, lung pathology in, 667

syndrome, iodiopathic, treatment of, with continuous positive airway pressure, 166
failure
complicating posttraumatic acute renal failure, 340
in neuromuscular disease, 876
in newborn, artificial ventilation in, 672
in shock, phenomenon of, 865
function
after cervical cordotomy, 340
lesser circulation in pulmonary fibrosis secondary to sarcoidosis and its relationship to, 661
in nonsmoking female cotton and jute workers, 866
in patients with chronic pulmonary diseases living at sea level and at altitude of 1,000 meters, 178
tests and significance of ratio of forced expiratory volume in one second to predicted vital capacity in surgical treatment of pulmonary tuberculosis, 180
and haemodynamic response to carbon dioxide breathing in patients with and without bronchial obstruction, 672
illnesses of infants and children, para-influenza virus infection in, 348
incapacity in coal mine workers of New South Wales, 866
nomogram, 877
problems, management of, in newborn, 672
symptoms, prevalence of, in school-children ages six to eleven years from Perth, Western Australia, 869
syncytial virus infection in children, rapid diagnosis of, by immunofluorescent technique, 869
system, structures of, and periodic ventilations, 512
tract, cell-mediated immunity and antibody responses in, after local and systemic immunization, 504
Rifampicin
effects of, on pulmonary tuberculosis, 862
-ethambutol
-isoniazid compared to streptomycin-PAS-isoniazid, 660
in retreatment cases of pulmonary tuberculosis, 492
for pulmonary tuberculosis
clinical evaluation of, 492
patients, 660
in treatment of severe cavitary pulmonary tuberculosis, 863
in treatment of severe cavitary pulmonary tuberculosis, 881
trial, Australian, 492
Rifampin
antituberculous activity of, 164
in combination with other antituberculous drugs, 164
and ethambutol treatment, results of, 863
in vitro and *in vivo* antituberculosis, effect of, 863
-isoniazid
hepatitis with icterus in course of treatments with, 335
treatment, increase in transaminase and icterus during, 164
in treatment of pulmonary tuberculosis, 324
serum levels of, with reduced dosage, 493
Roentgenology
alveo-bronchography, selective, comparison of pathological changes in upper and lower lung fields by means of, 878
arteriography
a modified technique, 341
wedge, for identification of pulmonary emboli in small vessels, 673
bronchography by tantalum inhalation, 877
differential diagnosis of phantom tumors of lung, 340
lymphography, intrapulmonary hemorrhage with anemia after, 878
mantle field, extended in treatment of malignant lymphoma, 342
mantle treatment of Hodgkin's disease, 342
scan, lung, in primary vascular pulmonary hypertension, 673
scanning, gallium 67 citrate, in neoplastic and inflammatory lesions, 341
scintillation camera, use of, in regional evaluation of pulmonary function in chronic obstructive pulmonary disease, 179
Running, bronchoconstriction induced by cycling and, 510
Rupture, spontaneous, of oesophageal diverticulum, 880
Sarcoidosis
and autonomous parathyroid hyperplasia, 667
characteristics in epidemiology of, 664
correlation in *in vivo* delayed-type hypersensitivity with *in vitro* lymphocyte transformation in, 668
immunoglobulin levels in, 667
immunological studies in patients recovered from, 668

lesser circulation in pulmonary fibrosis secondary to, 661
lung function in, 510
rapid intravenous calcium infusion test in, 339
unilateral hilar or paratracheal adenopathy in, 513
Sarcoma. *See* Tumors
Seagull droppings, bacterial and fungal flora of, in Jersey, 663
Serratia marcescens bacteremia, 330
Serum
activities, human against *Hemophilus influenza*, 872
isoniazid, rapid microbiological determination of, 493
levels
and lung tissue of methacycline, 862
of rifampin with reduced dosage, 493
proteins in pulmonary tuberculosis, paper electrophoretic studies of, 330
tritiated, nitrogen dioxide exposure and leakage of, 172
Shipyard pipe coverers, effects of low concentrations of asbestos on, 866
Shock lung, genesis of, 865
Singapore, lung disease with chronic obstruction in opium smokers in, 864
Skin
absorption of phenol vapour through, 665
testing, injector tuberculin, compared with Mantoux method, 671
Smoking
antismoking education study at University of Illinois, 669
chronic bronchitis, and lung cancer, 168
and chronic obstructive lung disease in alpha$_1$ antitrypsin deficiency, 662
cigarette
economic costs of, 669
damage to lung, effect of low temperature of combustion on, 504
effects of inhalation of, on ventricular fibrillation threshold in normal dogs and dogs with myocardial infarction, 874
effects of, on lactate extraction in presence of severe coronary atherosclerosis, 869
female cotton and jute workers, nonsmoking, respiratory function in, 866
habits of physicians and preventive care practices, 671
a world problem, 671
Sodium
cephalothin, use of, in management of lung gangrene, 880
ion, potassium ion and magnesium ion adenosine triphosphatase system associated with pulmonary alveolar macrophage, 173
Solar radiation and air pollution, 328
Sol phase composition, sputum and diagnosis in chronic chest disease, 500
Spore counts, fungal, and charity hospital asthma admission rates, 499
Sputum evacuation, surface active agents in, 663
STC. *See* 2,3-diphenyl-5-thienyl-2-tetrazolium chloride
Stenosis, mitral, fibrous mediastinitis presenting as, 342
Stockholm
health control of young male immigrants in, 337
12-year review of acute bacterial meningitis in, 677
Stomach
in chest, 343
tuberculosis of, 345
Streptoduocin, ototoxicity due to, 660
Streptomycin
-dependent strain, effect of antituberculosis agents on tubercle bacilli in resting state using, 873
hypersensitivity, 165
-isoniazid-ethambutol combination in primary treatment of pulmonary tuberculosis in mice, 668
-PAS-isoniazid compared to rifampicin-ethambutol-isoniazid, 660
Styblo's model, tuberculosis infection analyzed by, 499
Suction, endotracheal, prevention of hypoxia during, 343
Sulfamethoxazole
or carbenicillin combined with colistin, susceptibility of *Pseudomonas aeruginosa* to, 325
and trimethoprim in chronic bronchitis, double-blind cross-over trial of, 493
Sulfate, chick allantoic glycopeptide, antibody-combining oligosaccharides from, associated with influenza virus hemagglutinin, 330
Sulfur dioxide, removal of, by soil, 663
Surgical treatment of pulmonary tuberculosis
results of, in aged, 675
respiratory function tests and significance of ratio of forced expiratory volume in one second to predicted vital capacity in, 180
Surgery

lower abdominal, spinal and general anesthesia for, in patients with chronic obstructive pulmonary disease, 514
of pulmonary hydatid cysts, 880
Sweden
airborne tularemia in, 335
1959-66, comparison of lung cancer morbidity and mortality in, 664
Swedish cancer registry, completeness and reliability of lung cancer registration in, 332
Syndrome
respiratory distress, adult, 674
shoulder-hand, following pleural effusion, 347
wet-lung, and natural and artificial plasma volume expanders, 496
Tantalum inhalation, bronchography by, 877
Tetrachloroethylene, vapours of, excretion of organic chlorine compounds in urine of persons exposed to, 867
Tetracycline toxicity in renal failure, 506
Thal procedure, radiograph appearance of chest following, 343
Thiacetazone
ototoxicity of, 335
toxicity and efficacy of, 660
Thrombosis, chronic pulmonary artery, with features of unilateral hyperlucent lung syndrome, 165
Thyroid
gland, tuberculous abscess of, 676
tuberculosis of, 180
Tissue
cadmium and zinc content in emphysema and bronchogenic carcinoma, 503
connective, ultrastructural changes in, in lungs of rats exposed to NO_2, 172
lung and serum levels of methacycline, 862
pulmonary, proton irradiation of, and Vx2 carcinoma in lung of rabbit, 673
tonsillar, actinomyces in, 665
Toluene, excretion of hippuric acid and m- or p-methylhippuric acid in urine of persons exposed to vapours of, 867
Tongue, tuberculosis of, 677
Torulopsis, in vitro experiments with new antimycotic from Bay b 5097 and strains of, 330
Toxicity and efficacy of Thiacetazone, 660
Trachea, human embryo, simplified organ cultures of, in diagnosis of viral respiratory disease in children, 872
Tracheobronchial
secretions, 178
tree of rats, ciliary activity in, 333
Tracheostomy
laryngotracheal obstruction complicating, 879
swallowing dysfunction after, 344
Transaminase and icterus, increase in, during rifampin-isoniazid treatment, 164
Transient syndrome of inappropriate secretion of antidiuretic hormone in course of extensive pulmonary tuberculosis, 180
Transthoracic impedance, 512
Trichloroethylene
pulmonary oedema following exposure to, 499
vapours of, excretion of organic chlorine compounds in urine of persons exposed to, 867
Trimethoprim-sulfamethoxazole in chronic bronchitis, double-blind cross-over trial of, 493
Triphosphatase system, adenosine, associated with pulmonary alveolar macrophage, 173
Trisomy 18, mosaic, some radiographic features of, 341
Tubercle bacilli
antituberculosis chemotherapy *in vitro* under various conditions inadequate for growth of, 862
effect of antituberculosis agents on, in resting state using streptomycin-dependent strain, 873
kanamycin, pulmonary tuberculosis without, 863
miliary tuberculosis caused by intravenous self-injection of, 179
nonculturable, seen on fluorescence microscopy, 500
primary drug-resistance of, isolated from previously untreated tuberculous patients in Korea, 164
in resting state, effect of antituberculous agents against, 661
Tuberculin
allergy, naturally acquired, influence of isoniazid on, 329
intracutaneous test reactions to, containing methiolate as a preservative, 670
sensitivity
micro-method for peripheral leukocyte migration in, 872
in army recruits in Delhi cantonment, 329
negative intermediate-strength, in patients with active tuberculosis, 868
skin testing, jet injector, compared with

Mantoux method, 671
stabilized, persons positive to, but negative to nonstabilized, 670
test, heat killed BCG vaccine as, 670
testing, tuberculosis casefinding by, among various age children, 671
Tuberculosis
active, negative intermediate-strength tuberculin sensitivity in patients with, 868
adult, present usefulness of bronchoscopy in, 515
of aged, 345
casefinding by tuberculin testing among various age children, 671
chemoprophylaxis of, 176
communication in control of, 507
and computer, 516
concurrent pulmonary, and primary carcinoma, 501
conjunctival, 344
on detecting, 508
on endometrium, 345
drug-resistant, in Waltham Forest, 516
extensive pulmonary, transient syndrome of inappropriate secretion of antidiuretic hormone in course of, 180
feasibility of chemoprophylaxis trial in India against, 325
free drugs for treatment of, 508
and general hospital, 347
hospital, nontuberculous pulmonary diseases admitted to, in past 15 years, 509
immunological studies in patients recovered from, 668
infection in clusters of rural households, 328
logistics of chemoprophylaxis of, 669, 670
lung, suspected, 348
miliary
in adults, 881
caused by self-injection of tubercle bacilli, 179
mortality rate of, in Japan in 1980, 177
and new citizen, 875
in Okinawa, epidemiological analysis of, 499
in one lung and peripheral bronchial cysts in the other, 347
outbreak in Alabama high school, 516
prefectural difference in prevalence of, 176, 328
primary, recent medications in treatment of, 517
pulmonary
amyloidosis in, 348
changes in pattern and behavior of, 345
comparison of rifampin-ethambutol and viomycin-ethambutol in retreatment of, 492
control of, in India, 671
diagnosis of, by sputum microscopy, 345
effects of rifampicin on, 862
evaluation of streptomycin-isoniazid-ethambutol combination in primary treatment of, in mice, 668
inexpensive regimens in domiciliary treatment of, 347
intermittent chemotherapy of, 862
intravenous administration of ethambutol in, 180
laboratory diagnosis of, 346
long-term follow-up of patients with, found by national tuberculosis prevalence surveys, 881
methodology of controlled clinical trials in, 325
overdistension of lung after pneumonectomy in patients with, 673
preliminary hospitalization in domiciliary management of, 346
in Rajasthan, paper electrophoretic studies of serum proteins in, 330
respiratory function tests and significance of ratio of forced expiratory volume in one second to predicted vital capacity in surgical treatment of, 180
results of surgical treatment of, in aged, 675
rifampicin for, 660
surgical treatment of intractable, 343
treatment of, with rifampin-isoniazid, 324
tumor-like aspects of, 881
urinary tract involvement in, 678
without kanamycin-tubercle bacilli despite long-term administration of kanamycin, 863
severe cavitary pulmonary, rifampicin in retreatment of, 863, 881
of stomach
of thyroid, 180
of tongue, 677
d-Tubocurarine, blood-pressure responses to, 505
Tularemia, airborne, in Sweden, 335
Tumors
adenomatoid malformation, congenital cystic, with anomalous blood supply, 514
adenomas, lung, induction of, by chronic inhalation of bis (chloromethyl) ether, 171
carcinoid, 331

carcinoma
bronchial, metastatic ocular deposits due to, 502
bronchogenic
copper and iron values in sera of patients with, 332
and Philadelphia pulmonary neoplasm research project, 502
resection for, 515
selectivity in surgical treatment of, 880
30-year trend in Olmstead county, Minnesota, 501
tissue cadmium and zinc content in, 503
independent bilateral primary bronchial, 502
of larynx, treated by ^{60}Co supervoltage irradiation, 341
metastatic lung, associated with spontaneous pneumothorax, 332
of nasopharynx, 331
peripheral bronchial, treated with radioactive gold implantation, 513
primary, and concurrent pulmonary tuberculosis, 501
pulmonary, postpneumonectomy empyema in, 514
Vx2, proton irradiation of pulmonary tissue and, in lung of rabbit, 673
chest wall, 332
granuloma in bronchus, 332
hamartomas, multiple pulmonary, 169
lymphoma, malignant, extended mantle field in radiotherapeutic treatment of, 342
malignant, and lung metastasis, 170
mediastinal neural, complications of, 501
mycetomas
intracavitary, surgical implications of, 676
lung, treatment of, by intracavitary suction and local washing with amphotericin B, 165
neoplasm, pulmonary, Philadelphia research project, 502
pericardial, cysts and fat necrosis, 514
phantom, of lung, differential diagnosis of, 340
primary noncancerous pulmonary, statistical investigation on, 502
regression of, after intralesional injection of living *M. bovis*, 334
sarcoma, primary intrapulmonary neurogenic, with hypertrophic pulmonary osteoarthropathy and asbestosis, 332
Tween 80 compared with heat killed BCG vaccine as a tuberculin test, 670
2,3-diphenyl-5-thienyl-2-tetrazolium chloride, early detection of mycobacterial growth by application of, 500
2,3-diphosphoglycerate in acute asthma, 667
Uganda, whooping cough in, 348
Urinary tract involvement in pulmonary tuberculosis, 678
Vaccine, BCG, Indian freeze dried, 670
Valvotomy, aortic, *Aspergillus flavus* endaortitis following, 513
Veno-occlusive disease, pulmonary, of presumably intrauterine origin, 495
Ventilation
alveolar, method of detecting abnormal unevenness of, by single-breath oxygen inhalation, 877
artificial, in respiratory failure in newborn, 672
collateral, factors influencing, 510
mechanics of newborn infants, 340
perfusion
abnormality and static and dynamic lung volume in adult asthma, 877
relationship following correction of kyphoscoliosis, 672
periodic, and structures of respiratory system, 512
positive-pressure, humidification during, of infants, 865
Ventilatory
effects of forane, 174
function
in healthy adult Nigerians, 673
usefulness of peak flow rate in assessment of, 876
response to carbon dioxide during recovery from severe asthma, 511
Viomycin-ethambutol in retreatment of pulmonary tuberculosis, 492
Viraemia in influenza, 875
Virus infection, para-influenza, in respiratory illnesses of infants and children, 348
Waltham Forest, drug-resistant tuberculosis in, 516
Weather, air pollution, and mortality, 166
Wegener granulomatosis of lung, 165
Wheezing, prevalence of, in school-children ages six to eleven years from Perth, Western Australia, 869
Whooping cough in Uganda, 348
Workers
caisson, decompression sickness in, 876
coal
hyperinflation of lungs, 878
respiratory incapacity in, of New South

Wales, 866
cotton and jute, female, respiratory function in nonsmoking, 866
exposed to fiber glass, lungs of, 167
hemp, peak flow rate in relation to forced expiratory volume in, 498
insulation, in Belfast, 497
shipyard pipe coverers, effects of low concentrations of asbestos on, 866
Xenon 133 in regional evaluation of pulmonary function in chronic obstructive pulmonary disease, 179
X-ray, chest, community-wide surveys in Australia, 507
Xylene, m- or p-, excretion of hippuric acid and m- or p-methylhippuric acid in urine of persons exposed to vapours of toluene and, 867
Zinc content in emphysema and bronchogenic carcinoma, 503

AMERICAN REVIEW OF RESPIRATORY DISEASE

OFFICIAL JOURNAL OF THE AMERICAN THORACIC SOCIETY
MEDICAL SECTION OF THE NATIONAL TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION

EDITOR
WALSH McDERMOTT
New York, N.Y.

CONSULTING EDITOR
ESMOND R. LONG
Philadelphia, Pa.

ASSISTANT EDITOR
MARY J. THORNTON

ASSOCIATE EDITOR
DANIEL S. LUKAS
New York, N.Y.

EDITOR OF ABSTRACTS
EDWIN D. KILBOURNE
New York, N.Y.

BOOK REVIEW EDITOR
JAMES W. RALEIGH
Houston, Texas

BUSINESS MANAGER
DAVID D. KUSKIN
New York, N.Y.

EDITORIAL BOARD

MARY ELLEN AVERY
Montreal, Canada

IAN T. HIGGINS
Ann Arbor, Mich.

ROBERT OSEASOHN
Albuquerque, N. Mex.

GERARD M. TURINO
New York, N. Y.

MARGARET R. BECKLAKE
Montreal, Canada

ROBERT E. HYATT
Rochester, Minn.

SAMI SAID
Dallas, Tex.

EMANUEL WOLINSKY
Cleveland, Ohio

REUBEN M. CHERNIACK
Winnipeg, Canada

AVERILL A. LIEBOW
La Jolla, Calif.

WILLIAM M. THURLBECK
Montreal, Canada

GUY P. YOUMANS
Chicago, Ill.

FLOYD W. DENNY, JR.
Chapel Hill, N. C.

QUENTIN N. MYRVIK
Winston-Salem, N. C.

DONALD F. TIERNEY
Torrance, Calif.

MORTON M. ZISKIND
New Orleans, La.

EDITORIAL CONSULTANTS FROM SCIENTIFIC ASSEMBLIES

Clinical Problems Assembly
HERBERT A. SALTZMAN
Durham, N. C.

Microbiology and Immunology Assembly
ROBERT A. PATNODE
Oklahoma City, Okla.

Pediatrics Assembly
CARL F. DOERSHUK
Cleveland, Ohio

Respiratory Structure and Function Assembly
GARETH M. GREEN
Burlington, Vt.

Tuberculosis Assembly
ROBERT G. LOUDON
Washington, D. C.

EDITORIAL ASSISTANT: Paula E. Ruggiero

VOLUME 105
JANUARY-JUNE 1972

PUBLISHED MONTHLY

at 1740 Broadway, New York, N. Y. 10019

BY THE NATIONAL TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION

Copyright © 1972 by the National Tuberculosis and Respiratory Disease Association

AMERICAN REVIEW OF

Respiratory Disease

January 1972 Volume 105 Number 1

DAVID V. BATES	Air Pollutants and the Human Lung. The James Waring Memorial Lecture	1
GEORGE A. FALK, ARTHUR J. OKINAKA, AND GREGORY W. SISKIND	Immunoglobulins in the Bronchial Washings of Patients with Chronic Obstructive Pulmonary Disease	14
M. BURACZEWSKA, B. KWIATKOWSKI, W. MANOWSKA, AND H. RDULTOWSKA	Ultrastructure of Some Mycobacteriophages	22
W. F. VAN GANSE, B. G. FERRIS, JR., AND J. E. COTES	Cigarette Smoking and Pulmonary Diffusing Capacity (Transfer Factor)	30
CHARLES L. VASSALLO, J. B. L. GEE, AND BILL M. DOMM	Exercise-Induced Asthma. Observations Regarding Hypocapnia and Acidosis	42
WILLIAM F. WILLOUGHBY	Pulmonary Arteritis Induced by Cationic Proteins	50
WHEELAN D. SUTLIFF	Histoplasmosis Cooperative Study. V. Amphotericin B Dosage for Chronic Pulmonary Histoplasmosis	60
F. GIMENO, W. CHR. BERG, H. J. SLUITER, AND G. J. TAMMELING	Spirometry-Induced Bronchial Obstruction	68
EDGAR J. CALDWELL AND JOHN H. BLAND	The Effect of Penicillamine on the Rabbit Lung	75
B. U. BOWMAN, W. T. AMOS, AND J. C. GEER	Failure to Produce Experimental Sarcoidosis in Guinea Pigs with *Mycobacterium tuberculosis* and Mycobacteriophage DS6A	85
JOHN BROWN, DAVID T. BERMAN, AND JAMES H. TORRIE	Quantitative Studies of Mycobacterial Sensitins in Cattle	95
	CASE REPORTS	
TOSHIYA KINO, YUKINOBU KOHARA, AND SHUSUKE TSUJI	Pulmonary Alveolar Microlithiasis. A Report of Two Young Sisters	105

THOMAS A. NEFF, DAVID G. ASHBAUGH, AND THOMAS L. PETTY — Miliary Tuberculosis and Carcinoma of the Lung. Successful Treatment with Chemotherapy and Resection — 111

RAYMOND E. MOLDOW, SHELDON BEARMAN, AND MORTON H. EDELMAN — Pulmonary Amyloidosis Simulating Tuberculosis — 114

NOTES

N. C. SAHA AND V. N. DAMODARAN — Dermal Connective Tissue Changes in Chronic Respiratory Diseases — 118

AARON JANOFF — Inhibition of Human Granulocyte Elastase by Serum α_1-Antitrypsin — 121

GERALD L. MANDELL AND LARRY F. FULLER — Nitroblue Tetrazolium Dye Test: A Diagnostic Aid in Tuberculosis — 123

JAMES S. MILLEDGE AND SUSAN BENJAMIN — Arterial Desaturation after Sodium Bicarbonate Therapy in Bronchial Asthma — 126

A. W. LEES, G. W. ALLAN, J. SMITH, W. F. TYRRELL, AND R. J. FALLON — Re-treatment of Pulmonary Tuberculosis with Rifampin and Ethambutol — 129

A. W. LEES, G. W. ALLAN, J. SMITH. W. F. TYRRELL, AND R. J. FALLON — Rifampin and Isoniazid in Previously Untreated Patients with Pulmonary Tuberculosis — 132

A. W. LEES, G. W. ALLAN, J. SMITH, W. F. TYRRELL, AND R. J. FALLON — Isoniazid and Ethambutol in Previously Untreated Patients with Pulmonary Tuberculosis — 135

SUMMARY FROM THE BULLETIN OF THE WORLD HEALTH ORGANIZATION

Tuberculosis Epidemiology and Failures of Tuberculosis Control in Children — 137

CORRESPONDENCE

STEPHEN S. LEFRAK AND ROBERT DI BENEDETTO, Systemic Sarcoidosis with Severe Involvement of the Upper Respiratory Tract; ROGER S. MITCHELL, Hypersensitivity Reactions and Liver Toxicity Attributed to Isoniazid; J. F. COSTER; ELIZABETH BARRETT-CONNOR, The Nonvalue of Sputum Culture in the Diagnosis of Pneumonia. — 139

AMERICAN THORACIC SOCIETY

Organization and Committee Structure. 1971-1972 — 141

Obituary. William Spencer Schwartz — 160

Notices — 161

Necrology — 162

ABSTRACTS — 163

PROFESSIONAL RECRUITMENT — 181

AMERICAN REVIEW OF

Respiratory Disease

February 1972 Volume 105 Number 2

L. H. SCHMIDT	The John Barnwell Lecture. Improving Existing Methods of Control of Tuberculosis: A Prime Challenge to the Experimentalist	183
CAROLYN V. BROWN	Acute Isoniazid Poisoning	206
L. M. KAHANA AND W. M. THURLBECK	Surface Tension and Static Volume-Pressure Hysteresis in Pulmonary Emphysema and Other Conditions	217
V. A. MARINKOVICH AND R. G. KLEIN	Immunologic Characterization of a Lung Surfactant Preparation	229
ALFREDO A. JALOWAYSKI AND SAMUEL T. GIAMMONA	The Interaction of Bacteria with Pulmonary Surfactant	236
D. A. LINDSAY AND JOHN READ	Pulmonary Vascular Responsiveness in the Prognosis of Chronic Obstructive Lung Disease	242
CHARLES A. COHEN, ARNOLD R. HUDSON, JACK L. CLAUSEN, AND JOHN H. KNELSON	Respiratory Symptoms, Spirometry, and Oxidant Air Pollution in Nonsmoking Adults	251
YUKIO MATSUMURA, KATSUYUKI MIZUNO, TERUMASA MIYAMOTO, TAKEO SUZUKI, AND YOSHIO OSHIMA	The Effects of Ozone, Nitrogen Dioxide, and Sulfur Dioxide on Experimentally Induced Allergic Respiratory Disorder in Guinea Pigs. IV. Effects on Respiratory Sensitivity to Inhaled Acetylcholine	262
WILLIAM B. KLAUSTERMEYER, WILLIAM R. WINN, AND C. ROBERT OLSEN	Use of Cuffed Endotracheal Tubes for Severe Exacerbations of Chronic Airway Obstruction	268
S. M. WASAN AND T. F. MCELLIGOTT	An Electron Microscopic Study of Experimentally Induced Interstitial Pulmonary Fibrosis	276
	CASE REPORTS	
WARD B. HURLBURT	Spontaneous Intrathoracic Lymphocyst	283
J. RALPH MACFARLANE AND CRANSTON W. HOLMAN	Chylothorax	287

NOTES

GLADYS L. HOBBY AND TULITA F. LENERT	Observations on the Action of Rifampin and Ethambutol Alone and in Combination with other Antituberculous Drugs	292
ROBERT KANE AND H. MAC VANDIVIERE	The Significance of Multiple Simultaneous Tuberculin Skin-Testing in the Prediction of Various Mycobacterial Infections in the Host	296
ANN A. BROWDER AND ANNA L. GRIFFON	Tuberculin Tine Tests on Medical Wards	299
S. D. GREENBERG, F. GYORKEY, D. E. JENKINS, AND P. GYORKEY	Phagocytosis and the Granular Pneumonocyte	302
DAN C. STANESCU, PAUL DE SUTTER, KAREL P. van de WOESTIJNE	Pressure-Corrected Flow Body Plethysmograph	304
HAROLD D. ROSE	Mechanical Control of Hospital Ventilation and *Aspergillus* Infections	306
MITCHELL LITT AND DAVID E. SWIFT	The Babington Nebulizer: A New Principle for Generation of Therapeutic Aerosols	308
AGNES FAHY	BULLETIN OF THE WORLD HEALTH ORGANIZATION: ABSTRACTS OF ARTICLES IN VOLUME 43	311

CORRESPONDENCE

THOMAS A. NEFF; MAX E. CHILDRESS, GRANT MOY, MARTHA MOTTRAM, Unilateral Pulmonary Edema Resulting from Treatment of Spontaneous Pneumothorax 318

AMERICAN THORACIC SOCIETY

Introduction to Barnwell Lecture 319

NOTICES 320

ABSTRACTS 323

PROFESSIONAL RECRUITMENT 349

AMERICAN REVIEW OF

Respiratory Disease

March 1972 Volume 105 Number 3

GEOFFREY L. BRINKMAN	Ultrastructure of Atherosclerosis in the Human Pulmonary Artery	351
SADAMU ISHIKAWA, GARY A. FATTAL, JANINA POPIEWICZ, AND JOHN P. WYATT	Functional Morphometry of Myocardial Fibers in Cor Pulmonale	358
L. W. CHAKRIN, A. P. BAKER, S. S. SPICER, J. R. WARDELL, JR., N. DESANCTIS, AND C. DRIES	Synthesis and Secretion of Macromolecules by Canine Trachea	368
WILLIAM H. OBENOUR, PAUL M. STEVENS, ARTHUR A. COHEN, AND JOHN J. MCCUTCHEN	The Causes of Abnormal Pulmonary Function in Parkinson's Disease	382
JANICE J. GUNNELS AND JOSEPH H. BATES	Characterization and Mycobacteriophage Typing System	388
I. S. SNYDER, B. D. FAIRFAX, AND E. V. SAVARD	An Extracellular Product of *Mycobacterium phlei*. III. Relationship of Production to Microbial Growth and Evidence for a Similar Substance in other Mycobacteria	393
J. W. RALEIGH	Rifampin in Treatment of Advanced Pulmonary Tuberculosis. Report of a VA Cooperative Pilot Study	397
SRINIVASA RAO, MARJORIE BIDDLE, OSCAR J. BALCHUM, AND JOSEPH L. ROBINSON	Focal Endemic Coccidioidomycosis in Los Angeles County	410
	CASE REPORTS	
JOSEPH W. SOKOLOWSKI, DOUGLAS R. CORDRAY, EDWARD F. CANTOW, ROBERT C. ELLIOTT, AND ROBERT B. SEAL	Giant Cell Interstitial Pneumonia. Report of a Case	417
RICHARD A. KRUMHOLZ	Pulmonary Cryptococcosis. A Case Due to *Cryptococcus albidus*	421

LEON S. GOTTLIEB AND WARREN M. GOLD — Primary Tracheobronchial Amyloidosis — 425

SYMPOSIUM

CHARLES MITTMAN — Summary of Symposium on Pulmonary Emphysema and Proteolysis — 430

NOTES

A. EUGENE PFLUG, FREDERICK W. CHENEY, JR., AND JOHN BUTLER — Evaluation of an Intermittent Oxygen Flow System — 449

LEROY HYDE — Clinical Significance of the Tuberculin Skin Test — 453

H. O. K. TANZIL, A. CHATIM, R. RIO UTOMO, AND H. HARUN — Sensitivity of Various Species of *Nocardia* to Rifampin *in vitro* — 455

J. D. KHANDEKAR — Effect of Hemoptysis on Blood Fibrinolysis — 457

GRACE G. MAHER AND HERBERT W. BERGER — Massive Pleural Effusion: Malignant and Nonmalignant Causes in 46 Patients — 458

COMMITTEE REPORT

ROBERT B. MELLINS, VICTOR CHERNICK, CARL F. DOERSHUK, JOHN J. DOWNES, JOHN C. SINCLAIR, AND WILLIAM W. WARING — Respiratory Care in Infants and Children — 461

ANNOUNCEMENTS

NHLI Workshop on Epidemiology of Respiratory Disease — 484

AMERICAN THORACIC SOCIETY

Diagnostic Mediastinoscopy. A Statement of the Committee on Therapy — 487

Notices — 489

ABSTRACTS — 491

PROFESSIONAL RECRUITMENT — 518

AMERICAN REVIEW OF

Respiratory Disease

April 1972 Volume 105 Number 4

JEAN M. DICKINSON, P. S. JACKETT, AND D. A. MITCHISON	The Effect of Pulsed Exposures to Rifampin on the Uptake of Uridine-^{14}C by *Mycobacterium tuberculosis*	519
SYDNEY JACOBS AND HARRY B. GREENBERG	Diagnosis and Treatment of 20 Tuberculous Patients Who Entered a Community Hospital	528
R. COHEN AND E. M. OVERFIELD	The Diffusion Component of Arterial Hypoxemia	532
ROLAND H. INGRAM, JR., ROBERT B. MILLER, AND LUCILE A. TATE	Ventilatory Response to Carbon Dioxide and to Exercise in Relation to the Pathophysiologic Type of Chronic Obstructive Pulmonary Disease	541
LUISA C. STIGOL, GORDON F. VAWTER, AND JERE MEAD	Studies on Elastic Recoil of the Lung in a Pediatric Population	552
JOSEPH F. WILSON, GEORGE N. PETERS, AND KENNETH FLESHMAN	A Technique for Bronchography in Children. An Experience with 575 Patients Using Topical Anesthesia	564
MARTIN GROSS, JOHN R. ESTERLY, AND RICHARD H. EARLE	Pulmonary Alterations in Systemic Lupus Erythematosus	572
RAJ NARAIN, K. NAGANNA, AND PYARE LAL	Nonspecific Sensitivity and its Influence on Incidence of Pulmonary Tuberculosis	578
DENNIS E. NIEWOEHNER, JEROME KLEINERMAN, AND JAMES D. KNOKE	Regional Chronic Bronchitis	586
EIJI YOKOYAMA	Effect of Ventilation with Ozone on Pressure-Volume Relationships of Excised Dogs' Lungs	594
W. D. RICHARDS AND J. R. PEMBERTON	Flotation of Dispersed Inocula with Pentane for Improved Mycobacterial Pellicle	605

CASE REPORTS

GERALD N. OLSEN AND EDWARD W. SWENSON	Polymyositis and Interstitial Lung Disease	611

HOWARD GRUFT AND HANS G. HENNING — Pulmonary Mycobacteriosis Due to Rapidly Growing Acid-Fast Bacillus, *Mycobacterium chelonei* — 618

VED V. GOSSAIN, ALAN R. GERSTEIN, AND A. W. JANES — Goodpasture's Syndrome: A Familial Occurrence — 621

NOTES

YOUNG-SOON LEE LABELLE AND R. W. WALKER — The Phospholipids of *Mycobacterium smegmatis* — 625

JOHN W. OLDS, ALEXANDER L. KISCH, BETTY J. EBERLE, AND JOHN N. WILSON — *Pseudomonas aeruginosa* Respiratory Tract Infection Acquired from a Contaminated Anesthesia Machine — 628

VICTOR LORIAN AND LEON D. SABATH — The Effect of Some Penicillins on *Mycobacterium tuberculosis* — 632

HAROLD KELTZ, TERESITA SAMORTIN, AND DANIEL J. STONE — Hyperventilation: A Manifestation of Exogenous β-Adrenergic Stimulation — 637

STUART M. BROOKS, SHELDON MINTZ, AND EARLE WEISS — Changes Occurring after Freon Inhalation — 640

LEON S. GOTTLIEB, DAVID SAYERS, AND OSCAR J. BALCHUM — A Valve Ventilator Attachment for the Bronchoscope — 644

BOOKS — 648

AMERICAN THORACIC SOCIETY

Inhalation Therapy Contract Services. A Statement by the Committee on Inhalation Therapy — 652

Notices — 656

Necrology — 658

ABSTRACTS — 659

PROFESSIONAL RECRUITMENT — 679

AMERICAN REVIEW OF

Respiratory Disease

May 1972 Volume 105 Number 5

EDITH M. LINCOLN AND LILIAN A. GILBERT	Disease in Children due to Mycobacteria other than *Mycobacterium tuberculosis*	683
M. P. ZYKOV, JU. I. DONETS, AND S. J. POTI	Characteristics of *Mycobacterium tuberculosis* in Africa. Vulnerable and Invulnerable Types of Drug Resistance	715
GERARD WIJSMULLER AND ANGELO L. BARDINE	A Method of Characterizing Tuberculins	736
BENJAMIN AMIKAM, JOSE LANDA, JAMES WEST, AND MARVIN A. SACKNER	Bronchofiberscopic Observations of the Tracheobronchial Tree During Intubation	747
ANTONIO CUTILLO, EZIO OMBONI, AND SECONDO DELGROSSI	Effects of Respiratory Frequency on Distribution of Inspired Gas in Normal Subjects and in Patients with Chronic Obstructive Lung Disease	756
RICHARD E. SOBONYA AND JEROME KLEINERMAN	Morphometric Studies of Bronchi in Young Smokers	768
STEPHEN F. RYAN	Experimental Fibrosing Alveolitis	776
TULLIO C. MEDICI AND SANFORD CHODOSH	The Reticuloendothelial System in Chronic Bronchitis. 1. Quantitative Sputum Cell Populations during Stable, Acute Bacterial Infection, and Recovery Phases	792
J. OWEN HENDLEY, HARRIETTE B. FISHBURNE, AND JACK M. GWALTNEY, JR.	Coronavirus Infections in Working Adults. Eight-Year Study with 229 E and OC 43	805
JOHN F. BUSEY	Blastomycosis. III. A Comparative Study of 2-Hydroxystilbamidine and Amphotericin B Therapy	812
	CASE REPORTS	
MOIRA CHAN-YEUNG, STEFAN GRZYBOWSKI, AND MALCOLM E. SCHONELL	Mushroom Worker's Lung	819
LAURENCE M. CORTEZ AND G. A. PANKEY	Acute Pulmonary Hypersensitivity to Furazolidone	823

CONSTANTINE ARVANITAKIS, SISIR K. SEN, AND GEORGE F. MAGNIN — Fulminating Fatal Pneumonia due to Blastomycosis — 827

NOTES

TOSHIYA KINO AND SHUSUKE TSUJI — Two Depositories of Immunocompetent Cells for Delayed Hypersensitivity: The Lung and the Peritoneal Cavity — 832

EARLE B. WEISS AND C. JEFFREY CARLSON — Recording of Breath Sounds — 835

HARRY BAKER — Lack of Direct Evidence that Bronchospasm is a Prime Factor in the Production of Asthma — 839

M. GOVINDARAJ — The Effect of Dehydration on the Ventilatory Capacity in Normal Subjects — 842

T. N. WEGNER, R. E. REED, R. J. TRAUTMAN AND C. D. BEAVERS — Some Evidence for the Development of a Phagocytic Response by Polymorphonuclear Leukocytes Recovered from the Venous Blood of Dogs Inoculated with *Coccidioides Immitis* or Vaccinated with an Irradiated Spherule Vaccine — 845

J. K. FAWELL AND A. J. NEWMAN — Automated Method of Quantitating Experimental Pulmonary Emphysema — 849

J. MONTGOMERY SMITH — A Simple Screening Test for Antitrypsin Deficiency — 851

CORRESPONDENCE

R. E. ECKARDT, Chronic Nonspecific Respiratory Disease, Berlin, New Hampshire 1961–1967: A Cross Sectional Study; BENJAMIN FERRIS, JR.; MELVIN HOLDEN, Tuberculin Sensitivity in Elderly Patients; OM P. SHARMA, Treatment of Sarcoidosis; DAVID T. CARR, The Tuberculin Skin Test; JAMES A. SMOAKE, Another Attempt to Induce High Altitude Pulmonary Edema in Monkeys; R. VISWANATHAN — 854

BOOKS — 857

AMERICAN THORACIC SOCIETY

Notices — 859

ABSTRACTS — 861

PROFESSIONAL RECRUITMENT — 882

AMERICAN REVIEW OF

Respiratory Disease

June 1972 Volume 105 Number 6

PAUL D. STOLLEY	Asthma Mortality. Why the United States Was Spared an Epidemic of Deaths Due to Asthma	883
LEO F. BLACK, ROBERT E. HYATT, AND SAMUEL E. STUBBS	Mechanism of Expiratory Airflow Limitation in Chronic Obstructive Pulmonary Disease Associated with α_1-Antitrypsin Deficiency	891
B. P. JAIN, J. N. PANDE, AND J. S. GULERIA	Membrane Diffusing Capacity and Pulmonary Capillary Blood Volume in Chronic Obstructive Lung Disease	900
K. MATSUBA AND W. M. THURLBECK	A Morphometric Study of Bronchial and Bronchiolar Walls in Children	908
WILLIAM R. AYERS, D. BRADLEY MURRAY, PETER LUCHSINGER, R. E. SNELL, AND FREDERIC G. BURKE	Description of an On-Line Information System for Pediatric Pulmonary Patients. Operational Experience in the Emergency Rooms of Three Hospitals	914
GARY J. KAPLAN, ROBERT I. FRASER, AND GEORGE W. COMSTOCK	Tuberculosis in Alaska, 1970. The Continued Decline of the Tuberculosis Epidemic	920
GLORIA D. MASSARO AND DONALD MASSARO	Granular Pneumocytes. Electron Microscopic Radioautographic Evidence of Intracellular Protein Transport	927
H. J. SLUITER, E. J. BLOKZIJL, W. van DIJL, J. R. van HAERINGEN, C. HILVERING, AND E. J. STEENHUIS	Conservative and Respirator Treatment of Acute Respiratory Insufficiency in Patients with Chronic Obstructive Lung Disease. A Reappraisal	932
HUGO L. DAVID	Response of *Mycobacterium tuberculosis* to Environmental Changes. Survival after Transfer from Amino-Acid-Supplemented Medium to Basal Medium	944
	CASE REPORTS	
NIKO CAREVIC	Trauma in the Etiology of Bone and Joint Tuberculosis	954

ROBERT H. POE AND CARL G. SCHOWENGERDT — Two Cases of Atraumatic Herniation of the Liver — 959

EMANUEL WOLINSKY, FAUSTINO GOMEZ, AND FLETCHER ZIMPFER — Sporotrichoid *Mycobacterium marinum* Infection Treated with Rifampin-Ethambutol — 964

NOTES

ERNEST W. CHICK, DAVID S. BAUMAN, N. LEROY LAPP, AND WILLIAM KEITH C. MORGAN — A Combined Field and Laboratory Epidemic of Histoplasmosis. Isolation from Bat Feces in West Virginia — 968

H. WILLIAM TAEUSCH, JR., MICHAEL HEITNER, AND MARY ELLEN AVERY — Accelerated Lung Maturation and Increased Survival in Premature Rabbits Treated with Hydrocortisone — 971

J. DAVID HUGHES, F. RICHARD CONVERY, AND JEFFREY P. DRUCKER — Total Hip Replacement with Polymethylmethacrylate. Lack of Early Effect on Lung Function in Man — 974

AMERICAN THORACIC SOCIETY — 978

Abstracts of Papers Presented at the Annual Meeting of the American Thoracic Society Held in Conjunction with the Meetings of the National Tuberculosis and Respiratory Disease Association and the National Respiratory Disease Conference

Notices — 1022

PROFESSIONAL RECRUITMENT — 1024

INDEX, VOLUME 105

Index of Authors — 1025

Index of Subjects — 1028

Index of Abstracts — 1035

C

INDEX TO VOLUME 106
AUTHORS

Aberman, A., 472
Ablin, R. J., 281
Adam, W. E., 548
Adler, K., 86
Al Bazzaz, F. J., 721
Alford, R. H., 265
Andersen, I. B., 438
Anderson, S. D., 30
Arik, M., 752
Aron, S. A., 779
Ashley, M. J., 528
Aspin, N., 929
Avery, M. E., 929
Badger, T. L., 929
Baker, H., 784, 928
Balchum, O. J., 763
Ballantine, T. V. N., 23
Banerji, B. C., 404
Barbier, F., 515
Barlow, P. B., 622
Bauman, D. S., 752
Beam, R. E., 923
Bedell, G. N., 186, 541
Béland, J. E., 281
Bell, J. W., 97
Berdick, K. A., 740
Bergofsky, E. H., 47
Bianco, S., 30
Bigler, A., 392
Bitter, F., 548
Blackburn, C. R. B., 692
Blom, J., 79
Blondin, J., 477
Boey, H. K., 246
Bradley, S. G., 122
Brennan, P. J., 892
British Medical Research Council Investigation, 1
Brough, F. K., 604
Brown, A. L., Jr., 617
Brown, K. A., 774
Brummer, D. L., 784
Bryant, R. E., 265
Cahan, W. G., 594
Cappucci, D. T., Jr., 819
Carswell, W. A., 462
Carton, R. W., 857
Cassell, E. J., 677, 824, 835, 842
Chandor, S. M., 600
Chang, N., 867
Chaparas, S. D., 485
Cherniack, R. M., 38, 377
Chiang, S. T., 614
Chick, E. W., 752
Chiffelle, T. L., 219
Cline, M. J., 69
Cohen, A. B., 69
Colman, M. H., 692
Corpe, R. F., 923
Corro, P., 233
Cosens, M., 528
Costanzi, J. J., 909
Crane, S. C., 563
Da Costa, J. L., 246
Dandoy, S., 580
Daniel, T. M., 121
Dantzker, D. R., 273
David, H. L., 923
Davidson, F. F., 715
Dawson, D. J., 622
Derom, F., 515
deTreville, T. P., 684
Dickman, M., 604
Dietz, T. M., 213
Divertie, M. B., 617
D'Oliveira, J. J. G., 432
Dove, J. T., 485
Drusin, R. E., 357
Dulfano, M. J., 86
Dunn, W., 923
Dyson, J. L., 465
Earl, G. M., Jr., 898
Eaton, B. G., 260
Edwards, P. Q., 281
Elman, S. B., 580
Evans, M. J., 563
Ferebee, S. H., 357
Fine, M. H., 752
Flannery, E. P., 79
Fletcher, G., 914
Frand, U. I., 472
Frazier, C. A., 281

FREEMAN, G., 563
FULOP, M., 472
FURCOLOW, M. L., 752
FURIOSI, N. J., 563
GANGADHARAM, P. R., 275
GARIBALDI, R. A., 357
GELLER, R. D., 278
GENT, M., 179
GERST, P. H., 881
GILDER, H., 556
GLAUSER, F. L., 776
GOLD, C., 116
GOLDMAN, A. L., 109
GORDON, M. A., 784
GRACEY, D. R., 617, 622
GREGG, M. B., 357
GROSS, P., 684
GRUFT, H., 119
HARKLEROAD, L. E., 909
HEDRICK, S., 485
HIGLEY, C. S., 759
HILL, D. J., 873
HINDS, M. W., 784
HIRANO, N., 269
HIZON, R., 881
HOLMES, T. H., 610
HONG KONG TUBERCULOSIS TREATMENT SERVICE, 1
HORI, M., 769
HSU, K. H. K., 275
HUNT, K. K., 109
HYATT, R. E., 366
HYDE, L., 281
IKEDA, T., 384
IRANI, F. A., 179
ISHIZAKI, T., 475
JACKSON, B., 604
JANICKI, B. W., 779
JANIS, K. M., 914
JANOFF, A., 114, 477
JOHN, J. T., 265
JOHNSTON, W. W., 118
JONES, J. S. R., 925
JONES, N. L., 179
JONES, R. K., 219
JONES, V., 278
KABE, J., 475
KAFER, E. R., 100
KAMAT, S. R., 404, 414
KARPICK, R. J., 458
KASS, I., 622
KATZ, J., 202
KATZ, S., 472
KAWAGUCHI, K., 769
KAZEMI, H., 721
KELLER, A. R., 79
KHULLER, G. K., 892
KIBELSTIS, J. A., 772
KILBURN, J. O., 923
KILLOUGH, E. M., 528
KIMBEL, P., 384
KMIECIK, J. E., 273
KNAUER, C. M., 849
KONIETZKO, N., 548
KRASNITZ, A., 202
KRUGER, K., 710
KUHN, C., 931
KUNOFSKY, S., 202
KUPLIC, J. B., 759
LAMONT, H., 515
LANDAU, L. I., 873
LANGRIDGE, W. H. R., III, 450
LEBOWITZ, M. D., 677, 824, 835, 842
LEIGH, J., 100
LERNER, E., 86
LEVISON, H., 710, 867, 929
LEVY, L., 917
LEWIS, C. I., 480
LEWIS, J. E., 849
LITHERLAND, O. K., 784
LODDENKEMPER, R., 857
LOURENCO, R. V., 857
LUFT, U. C., 219
LUNDQVIST, G. R., 438
MANGANIELLO, V., 767
MANKIEWICZ, E., 281, 609
MANSELL, A., 710
MARCUS, S., 213
MARTIN, R. R., 920
MASON, R. J., 767
MASS, B., 384
MASSARO, D., 271
MASUDA, K., 769
MATTHYS, H., 548
MAUDERLY, J. L., 213
MAYNARD, J. E., 278
MCCARROLL, J. R., 677, 824, 835, 842
MCCLELLAN, R. O., 219
MCEVOY, J. D. S., 30
MCGEADY, J. C., 480
MCSHERRY, C. K., 556
MERANZE, D. R., 384

Mikhail, J. R., 465
Mitchell, D. N., 465
Mitchell, M. M., 925
Miyamoto, T., 475
Mohr, J. A., 260, 898
Montessori, G., 904
Moon, N., 917
Moore, W. D., 563
Morgan, B. A., 610
Morris, J. F., 776
Moss, J. D., 849
Moulton, R. G., 213
Muggenburg, B. A., 219
Murray, J. F., 715
Musher, D. M., 920
Nazemi, M. M., 920
Newhouse, M. T., 179
Nichols, N. B., 260
Niewoehner, D. E., 759
Ogunlesi, T. O. O., 465
Olive, J. T., Jr., 366
O'Shea, J. L., 819
Ostrow, D. N., 377
Overrath, G., 548
Pankey, G. A., 784
Park, S. S., 233
Patterson, C. D., 260
Patterson, J. G., 904
Perez-Guerra, F., 909
Petty, T. L., 784
Pfleger, R. C., 219
Phelan, P. D., 873
Philippoff, W., 86
Pickrell, J. A., 219
Pixley, E., 541
Poh, S. C., 239
Proctor, D. F., 438
Raber, M. B., 38
Raju, V. R. K., 414
Raleigh, J. W., 469
Rao, T. L., 414
Ratledge, C., 774
Raychaudhuri, A., 779
Reichman, L. B., 194
Renzetti, A. D., Jr., 392, 925
Resnick, H., 772
Rhoades, E. R., 260
Riley, E., 594
Roberts, L. N., 904
Rodman, N. F., 541
Rolf, L. L., 740
Rosenberg, R., 114, 477
Rossi, N. P., 541
Rothstein, E., 125
Roycroft, D. W., 109
Rühle, K. H., 548
Sanchez, Elio, 923
Sandhaus, R., 114
Sarma, B. S., 414
Schachter, E. N., 458, 587
Schlehe, H., 548
Schmidt, C. Du W., 604
Schmidt, J. D., 469
Schultz, F. J., 480
Schwartz, S. H., 897
Schwartz, M. I., 79, 109
Shallenberger, D. W., 121
Sharma, O. P., 600, 763
Shim, C., 233
Shoji, K., 769
Simmons, D. H., 729
Sinha, R., 47, 881
Smith, D. T., 118
Smith, E. B., 469
Smith, G. D., 819
Smith, J. A., 194
Spears, A. W., 480
Stein, I. M., 472
Stein, P. D., 898
Steinberg, H. N., 273
Stephens, R. J., 563
Strauss, L., 607
Sushida, K., 269
Takaro, T., 58
Tamari, M. G., 609
Tashkin, D. P., 729
Tasson, J., 515
Taylor, J. W., 607
Thomas, T., Jr., 271
Tinker, M. A., 881
Tock, E. P. C., 246
Tong, M. J., 23
Tosh, F. E., 278
Travis, D. M., 740
Tripp, T. L., 710
Tucker, W. B., 139
Van Hein-Wallace, S. E., 465
Vaughan, M., 767
Venkataraman, C., 414
Vermeire, P., 515
Versieck, J., 515
Wagner, J. C., 116

WAGNER, J. R., 480
WALKER, R. W., 450
WALSH, R. E., 909
WATANABE, S., 392
WEINBAUM, G., 384
WEIR, M. P., 450
WHITCOMB, M. E., 79
WHITE, R. H., 898
WIGLE, W. D., 528
WILLIAMS, M. H., JR., 233
WILLIAMS, W. J., 465
WOODS, G. T., 535
WOOLCOCK, A. J., 692
WOOLF, C. R., 610
WOOLPERT, S. F., 281
WOOTEN, O., 86
WUSTEMAN, F. S., 116
YAMADA, T., 769
YEAGER, H., JR., 469
YOUEL, D. B., 23
YOUNG, R. C., JR., 931
ZAVALA, D. C., 186, 541

SUBJECTS

Acetylcholine, follow-up studies in subjects with airway tract sensitive to (Note), 475
Acidosis, metabolic, and lung mechanics in dogs, 881
Adolescents, asthmatic, small airway disease in asymptomatic, 873
Aerosols, distribution and clearance of, in patients with bronchiectasis, 857
Air pollution, weather, and symptoms in urban population, 677
Airway
  conductance, specific, effect of carbon dioxide breathing on, in normal and asthmatic subjects, 729
  disease, small, in asymptomatic asthmatic adolescents, 873
  obstruction
    extrathoracic, maximal breathing capacity in (Note), 925
    upper, pulmonary function studies in patients with, 233
  pressures, static, effects of differences in, between two lungs in experimental unilateral hypoxia-hypercarbia, 58
  resistance
    and lung volumes, changes in after exercise in asthmatic subjects, 30
    regional and total, in patients with asthma, chronic bronchitis, and chronic pulmonary emphysema, bronchodilator and corticosteriod effects on, 392
  tract sensitive to acetylcholine, follow-up studies in subjects with (Note), 475
Alcohol-induced pain and itching on hot shower in sarcoidosis, 763
Alpha$_1$-antitrypsin, mechanical properties of lungs in intermediate deficiency of, 377
Altitude, high, study of cardiopulmonary function on exposure to, 404, 414
Alveolar
  -capillary membrane in pulmonary sarcoidosis (Note), 617
  macrophage alanine-*p*-nitrophenyl esterase resistance to endogenous antiproteases (Note), 114
American Thoracic Society
  National autopsy study on underground coal miners, 148
  Preliminary report of subcommittee on visual aids of teachers conference of Eastern section of American Thoracic Society, 635
  Notices, 148, 286, 491, 647, 790, 933
p-Aminosalicylate, inhibition of mycobactin formation in *M. smegmatis* by (Note), 774
Antigens
  evaluation of reference system for, of *M. tuberculosis*, 142
  mycobacterial, separation and isolation of, by continuous-flow electrophoresis (Note), 779
Asthma
  asymptomatic, small airway disease in adolescents with, 873
  bronchodilator and corticosteriod effects on regional and total airway resistance in patients with, 392
  bronchospasm in (correspondence), 784
  changes in lung volumes and airway resistance after exercise in patients with, 30
  children with, effect of nebulized bronchodilator administered with or without intermittent positive pressure breathing on ventilatory function in, 867
  effect of carbon dioxide breathing on specific airway conductance in normal and subjects with, 729
  intrinsic and extrinsic, evaluation of disodium cromoglycate in, 179
  maximal expiratory flow and total respiratory resistance during induced bronchoconstriction in subjects with, 336
Autopsy study, national, on underground coal miners (ATS Statement), 148
Bacteriophages, isolation from media of two (Note), 269
Benzolamide, response to, in development of hypoxemia in oxygen-induced lung disease, 740
Biopsy
  bronchial brush, new mobile catheter in, 541

percutaneous lung, with cutting needle, 186
Biosynthesis, lipid, from ethanol by rabbit lung (Note), 271
Bleomycin lung, acute (case report), 909
Books
Histoplasmosis. Proceedings of the Second National Conference Held at the Center for Disease Control, Atlanta, Georgia. Edited by Libero Ajello, Ernest W. Chick, and Michael Furcolow, 788
Intensive and Rehabilitative Respiratory Care. A Practical Approach to the Management of Acute and Chronic Respiratory Failure. Edited by Thomas L. Petty, 489
Principles of Chest X-Ray Diagnosis. 3rd Edition. By George Simon, 788
Progress in Respiration Research. Vol. 5, Pulmonary Circulation. Edited by J. Widimsky, S. Daum, and H. Herzog, 488
Use and Interpretation of the Lung Scan. By Fred S. Mischkin and Richard E. Brashear, 488
Bovine tuberculosis in humans in Ontario, 528
Breathing
capacity, maximal, in extrathoracic airway obstruction (Note), 925
effect of carbon dioxide, on specific airway conductance in normal and asthmatic subjects, 729
intermittent positive pressure, effect of nebulized bronchodilator administered with or without, on ventilatory function in children with cystic fibrosis and asthma, 000
Bronchiectasis, distribution and clearance of aerosols in patients with, 867
Bronchitis, chronic, bronchodilator and corticosteroid effects on regional and total airway resistance in patients with, 392
Bronchoconstriction, induced, maximal expiratory flow and total respiratory resistance during, in asthmatic subjects, 366
Bronchodilator
and corticosteriod effects on regional and total airway resistance in patients with asthma, chronic bronchitis, and chronic pulmonary emphysema, 392
nebulized, effect of, administered with or without intermittent positive pressure breathing on ventilatory function in children with cystic fibrosis and asthma, 867
Bronchoscopies, negative, new mobile catheter for obtaining bronchial brush biopsies in patients with, 541
Bronchospasm in asthma (correspondence), 784
Busulfan therapy, long-term, in chronic myeloid leukemia, pulmonary ossification associated with (case report), 759
Capillary (ies)
permeability, pulmonary, in heroin edema (Note), 472
pulmonary, ultrastructural lesions of, systemic lupus erythematosus in patient with (correspondence), 931
Calcification and glycosaminoglycans in lesions of progressive massive fibrosis and in pleural plaques (Note), 116
Cardiopulmonary function, study of, on exposure to high altitude, 404, 414
Carbon dioxide
breathing, effect of, on specific airway conductance in normal and asthmatic subjects, 729
tension, accuracy of routine arterial puncture for determination of (Note), 776
Catalase activity, weak, strains of *M. kansasii* with (Note), 119
Catheter, new mobile, for obtaining bronchial brush biopsies, 541
Catheterization data, cardiac, in idiopathic pulmonary hemosiderosis (case report), 904
Cerebrospinal fluid concentrations of rifampin in meningeal tuberculosis, 432
Chemotherapy
for pulmonary tuberculosis, study in Hong Kong to evaluate role of pretreatment susceptibility tests in selection of regimens of, 1
of tuberculosis (VA Conference), 139
Children
with cystic fibrosis and asthma, effect of nebulized bronchodilator administered with or without intermittent positive pressure breathing on ventilatory function in, 867
effect of two instructional procedures on performance of spirometry test in (Note), 604
measurement of respiratory resistance in, by forced oscillations, 710
Chondrosarcoma. *See* Tumors
Cigarettes, *See* Smoking

Coal miners, underground, national autopsy study on (ATS Statement), 148
Coccidioidin skin testing by intradermal jet injection (Note), 278
Computer, desk-top, application of, in clinical spirometry (Note), 614
Contamination, bacterial, method for monitoring, of inhalation therapy machines (Note), 920

CORRESPONDENCE
Acute pulmonary hypersensitivity to furazolidone, 786
Bronchospasm in asthma, 784
Change of name for NTRDA, 929
Elevation of serum IgA in emphysema, 283
Failure to produce experimental sarcoidosis in guinea pigs with *M. tuberculosis* and mycobacteriophage DS6A, 284
Hypersensitivity reactions and liver toxicity attributed to isoniazid, 281
Inhalation therapy contract service, 622
Inhaled water droplets, 928
Pregnancy and tuberculosis, 785
Pulmonary cryptococcosis due to *Cryptococcus albidus*, 786
Role of faith or religion in healing, 285
Systemic lupus erythematosus in patient with ultrastructural lesions of pulmonary capillaries previously reported in REVIEW as due to idiopathic pulmonary hemosiderosis, 931
Tests for niacin production, 622
Treatment of sarcoidosis, 931
The tuberculin skin test, 282, 622
Way to classify chronic obstructive pulmonary disease, 622
Corticosteriod and bronchodilator effects on regional and total airway resistance in patients with asthma, chronic bronchitis, and chronic pulmonary emphysema, 392
Cryptococcosis, pulmonary
due to *Cryptococcus albidus* (correspondence), 786
followed by pulmonary tuberculosis (case report), 594
Cystic fibrosis, children with, effect of nebulized bronchodilator administered with or without intermittent positive pressure breathing on ventilatory function in, 867
Deoxyribonuclease and lysogeny production in mycobacteria (Note), 609
Deoxyribonucleic acid, reassociation of, from selected mycobacteria with that from *M. bovis* and *M. farcinica* (Note), 122
Dichlorbenzophenone as nonradioactive tracer for cigarette smoke-gas chromatographic analysis of tracer (Note), 480
Diffusing capacity measurements, pulmonary, use of, to detect unsuspected fat embolism, 715
Disodium cromoglycate
effect of, on plasma 17-hydroxycorticoid concentration during exercise (Note), 610
evaluation of, in intrinsic and extrinsic asthma, 179
Dog
metabolic acidosis and lung mechanics in, 881
pathophysiologic sequelae of bronchopulmonary lavage in, 219
Edema, heroin pulmonary, and increased pulmonary capillary permeability (Note), 472
Electrophoresis, continuous-flow, separation and isolation of mycobacterial antigens by (Note), 779
Embolism
fat, use of pulmonary diffusing capacity measurements to detect unsuspected, 715
pulmonary, vascular invasion by chondrosarcoma simulating (case report), 109
Emphysema
cellular and species specificity in induction of experimental, 384
chronic pulmonary, bronchodilator and corticosteriod effects on regional and total airway resistance in patients with, 392
elevation of serum IgA in (correspondence), 283
Environment, urban, health and, 824, 835, 842
Erythema multiforme, sarcoidosis presenting with (case report), 462
Erythematosus, systemic lupus, in patient with ultrastructural lesions of pulmonary capillaries (correspondence), 931
Esterase, human alveolar macrophage alanine-*p*-nitrophenyl, resistance to endogenous antiproteases (Note), 114
Ethanol, lipid biosynthesis from, by rabbit lung (Note), 271

Exercise
changes in lung volumes and airway resistance after, in asthmatic subjects, 30
effect of disodium cromoglycate on plasma 17-hydroxycorticoid concentration during (Note), 610
Expiratory flow, maximal, and total respiratory resistance during induced bronchoconstriction in asthmatic subjects, 366
Fibrosis
cystic, effect of nebulized bronchodilator administered with or without intermittent positive pressure breathing on ventilatory function in children with, 867
progressive massive, glycosaminoglycans and calcification in lesions of (Note), 116
Fistula
pancreatic-bronchial (case report), 97
subclavian arterial-pulmonary arterial, associated with healed cavitary tuberculosis (case report), 898
Furazolidone, acute pulmonary hypersensitivity to (correspondence), 786
Gentamicin, tularemia treated successfully with (case report), 265
Glycosaminoglycans and calcification in lesions of progressive massive fibrosis and plaques (Note), 116
Guinea pigs, failure to produce experimental sarcoidosis in, with *M. tuberculosis* and mycobacteriophage DS6A (correspondence), 284
Hemosiderosis, idiopathic pulmonary (case report), 904
systemic lupus erythematosus in patient with ultrastructural lesions of pulmonary capillaries previously reported as due to (correspondence), 931
Hepatitis, isoniazid-associated, 357, 849
failure to demonstrate transformation of lymphocytes of patients with (Note), 485
Heroin pulmonary edema and increased pulmonary capillary permeability (Note), 472
Hodgkin's disease of lung, 79
Hong Kong, study in, to evaluate role of pretreatment susceptibility tests in selection of regimens of chemotherapy for pulmonary tuberculosis, 1
Hospital use, general, current status of, for tuberculous patients in U.S., 580
Humidities, four controlled, human nasal mucosal function under, 438
Hypercapnia, recurrent respiratory failure associated with absence of ventilatory response to (case report), 100
Hyperinflation, positive pressure, prolonged alteration of lung mechanics in kyphoscoliosis by, 47
Hypersensitivity
acute pulmonary, to furazolidone (correspondence), 786
reactions and liver toxicity attributed to isoniazid (correspondence), 281
Hypoxemia
arterial, and distribution of pulmonary perfusion after uncomplicated myocardial infarction, 721
development of, in oxygen-induced lung disease, 740
recurrent respiratory failure associated with absence of ventilatory response to (case report), 100
Hypoxia-hypercarbia, experimental unilateral, effects of differences in static airway pressures between two lungs in, 58
IgA
deficiency in sarcoidosis (case report), 600
serum, elevation of, in emphysema (correspondence), 283
Illinois, evidence for periodicity of swine influenza in, 535
Illness, minor, burden of, in healthy population, 824, 835, 842
Infarction, uncomplicated myocardial, arterial hypoxemia and distribution of pulmonary perfusion after, 721
Infection
cutaneous, due to *Runyon Group III* atypical *Mycobacterium* (case report), 469
M. abscessus, in puncture wound (Note), 275
Influenza, swine, evidence for periodicity of, in Illinois, 535
Inhalation therapy
contract service (correspondence), 622
machine, method for monitoring bacterial contamination of (Note), 920
Isoniazid
-associated hepatitis, 357, 849
failure to demonstrate transformation of lymphocytes of patients with (Note), 485
hypersensitivity reactions and liver toxic-

ity attributed to (correspondence), 281
metabolic products of, reagent-impregnated paper strip for detection of, in urine (Note), 923
Jet injection, intradermal, coccidioidin skin testing by (Note), 278
Kyphoscoliosis, prolonged alteration of lung mechanics in, by positive pressure hyperinflation, 47
Lavage, bronchopulmonary, pathophysiologic sequelae of, in dog, 219
Lecithin
content of lung, desaturated, effect of thyroxine on (Note), 767
lung, improved method for measuring incorporation of palmitic acid into, 556
Lesions
of progressive massive fibrosis, glycosaminoglycans and calcification in (Note), 116
ultrastructural, of pulmonary capillaries, systemic lupus erythematosus in patient with (correspondence), 931
Leukemia, chronic myeloid, pulmonary ossification associated with long-term busulfan therapy in (case report), 759
Lipid metabolism and oleic acid uptake, relationships between, in *M. smegmatis*, 450
Liver toxicity attributed to isoniazid (correspondence), 281
Lung
acute bleomycin (case report), 909
biopsy, percutaneous, with cutting needle, 186
desaturated lecithin content of, effect of thyroxine on (Note), 767
disease
chronic obstructive, in Singapore, 260
oxygen-induced, respiratory failure in, 740
effects of differences in static airway pressures between two, in experimental unilateral hypoxia-hypercarbia, 58
as embattled domain against inanimate pollutants, 684
function
regional, in different body positions in patients with pulmonary tuberculosis, 548
ventilatory, factors affecting normal values for, 692
Hodgkin's disease of, 79
homotransplantation, respiratory function after, with ten-month survival in man, 515
lecithin, improved method for measuring incorporation of palmitic acid into, 556
mechanical properties of, in intermediate deficiency of alpha$_1$-antitrypsin, 377
mechanics
and metabolic acidosis in dogs, 881
prolonged alteration of, in kyphoscoliosis by positive pressure hyperinflation, 47
rabbit, lipid biosynthesis from ethanol by (Note), 271
volumes and airway resistance, changes in, after exercise in asthmatic subjects, 30
Lymphocyte (s)
failure to demonstrate transformation, of patients with isoniazid-associated hepatitis (Note), 458
transformation, 260
Lysogeny and deoxyribonuclease production in mycobacteria (Note), 609
Macrophages
foamy, *in vitro* studies of, of postobstructive endogenous lipoid pneumonia in man, 69
human lung, inhibitor in, active against human neutrophil elastase (Note), 477
Malaria, *Plasmodium falciparum*, pulmonary function studies in, 23
Mannophosphoinositides of unclassified *Mycobacterium* P_6, 892
Meningitis, relapsing tuberculous, complicated by late sequelae (case report), 458
Methimazole, inhibition of multiplication of *M. leprae* by (Note), 917
Microscopy
electron, alveolar-capillary membrane in pulmonary sarcoidosis studied by (Note), 617
fluorescence, of tubercle bacilli using inexpensive apparatus (Note), 607
Monkey, tuberculosis transmitted from man to, 819
Mycobacteria
lysogeny and deoxyribonuclease production (Note), 609
ribosomes of, inhibition of polyphenylalanine synthesis on, by tuberactinomycin-N (Note), 769
selected, reassociation of deoxyribonucleic acid from, with that from *M. bovis* and *M. farcinica* (Note), 122

Mycobacterial antigen workshop, 142
Mycobacteriophage DS6A and *M. tuberculosis,* failure to produce experimental sarcoidosis in guinea pigs with (correspondence), 284
Mycobacterium
abscessus infection in puncture wound (Note), 275
atypical *Runyon Group III,* cutaneous infection due to (case report), 469
bovis and *M. farcinica,* reassociation of deoxyribonucleic acid from selected mycobacteria with that from (Note), 122
kansasii, strains of, with weak catalase activity (Note), 119
leprae, inhibition of multiplication of, by methimazole (Note), 917
P_6, unclassified, mannophosphoinositides of, 892
smegmatis
inhibition of mycobactin formation in, by *p*-aminosalicylate (Note), 774
relationships between oleic acid uptake and lipid metabolism in, 450
tuberculosis
evaluation of reference system for antigens of, 142
and mycobacteriophage DS6A, failure to produce experimental sarcoidosis in guinea pigs with (correspondence), 284
protamylase-H37Rv (PH) active against (Note), 269
Mycobactin formation, inhibition of, in *M. smegmatis* by *p*-aminosalicylate (Note), 774
Nasal mucosal function under four controlled humidities, 438
National Heart and Lung Institute workshop on pediatric pulmonary diseases, 625
Neutrophil elastase, inhibitor in human lung macrophages active against (Note), 477
Niacin production, tests for (correspondence), 622
Nitrogen dioxide, subacute covert reduction in ventilatory surface in rats during prolonged exposure to, 563
Oleic acid uptake and lipid metabolism, relationships between, in *M. smegmatis,* 450
Ontario, bovine tuberculosis in humans in, 528
Opium smoking, effects of, in cigarette smokers, 239
Oscillations, forced, measurement of respirator resistance in children by, 710
Ossification, pulmonary, associated with long-term busulfan therapy in chronic myeloid leukemia (case report), 759
Oxygen
-induced lung disease, respiratory failure due to, 740
tension
accuracy of routine arterial puncture for determination of (Note), 776
measurements in small samples (Note), 914
Palmitic acid, improved method for measuring incorporation of, into lung lecithin, 556
Paper strip, reagent-impregnated, for detection of metabolic products of isoniazid in urine (Note), 923
Perfusion, pulmonary, arterial hypoxemia and distribution of, after uncomplicated myocardial infarction, 721
Plasma 17-hydroxycorticoid concentration, effect of disodium cromoglycate on, during exercise (Note), 610
Plasmodium falciparum malaria, pulmonary function studies in, 23
Pleural
fluid proteins, quantitative determination of several (Note), 121
plaques, glycosaminoglycans and calcification in (Note), 116
Pneumonia, postobstructive endogenous lipoid, *in vitro* studies of foamy macrophage of, 69
Pollutants, inanimate, lung as embattled domain against, 684
Polyphenylalanine synthesis, inhibition of, on ribosomes of mycobacteria by tuberactinomycin-N (Note), 769
Pregnancy and tuberculosis (correspondence), 785
Protamylase-H37Rv (PH) active against *M. tuberculosis* (Note), 269
Protein (s)
derivative, purified, isolation of specific and nonspecific components from, 213
pleural fluid, quantitative determination of several (Note), 121
Pulmonary
diffusing capacity measurements, use of, to detect unsuspected fat embolism, 715

disease
chronic obstructive, way to classify (correspondence), 622
pediatric, National Heart and Lung Institute workshop on, 625
research conference (VA Conference), 125
function
studies
in patients with upper airway obstruction, 233
in *Plasmodium falciparum* malaria, 23
tests in idiopathic pulmonary hemosiderosis (case report), 904
lesions, suspicious, new mobile catheter for obtaining bronchial brush biopsies in patients with, 541
Puncture, arterial, accuracy of routine, for determination of oxygen and carbon dioxide tensions (Note), 776
Rabbit lung, lipid biosynthesis from ethanol by (Note), 271
Rats, covert reduction in ventilatory surface in, during prolonged exposure to subacute nitrogen dioxide, 563
Religion, role of, in healing (correspondence), 285
Respiratory
disease, training programs in, 289
failure
in oxygen-induced lung disease, 740
recurrent, associated with absence of ventilatory response to hypercapnia and hypoxemia (case report), 100
function after lung homotransplantation with ten-month survival in man, 515
resistance
in children, measurement of, by forced oscillations, 710
total and maximal expiratory flow during induced bronchoconstriction in asthmatic subjects, 366
Ribosomes of mycobacteria, inhibition of polyphenylalanine synthesis on, of mycobacteria by tuberactinomycin-N (Note), 769
Rifampin, cerebrospinal fluid concentrations of, in meningeal tuberculosis, 432
Sarcoidosis
alcohol-induced pain and itching on hot shower in (case report), 763
failure to produce experimental, in guinea pigs with *M. tuberculosis* and mycobacteriophage DS6A (correspondence), 284
with genital involvement (case report), 465
IgA deficiency in (case report), 600
presenting with erythema multiforme (case report), 462
pulmonary, alveolar-capillary membrane in (Note), 617
treatment of (correspondence), 931
Serum
IgA in emphysema, elevation of (correspondence), 283
trypsin inhibitor capacity and purulent sputum (Note), 772
Singapore, chronic obstructive lung disease in, 246
Skin test
coccidioidin, by intradermal jet injection (Note), 278
nonreactive, lymphocyte transformation as aid in diagnosis of tuberculosis in patients with, 194
reactions, tuberculin, 752
tuberculin
(correspondence), 282, 622
problem of "boost" effect in (Note), 118
Smoking
cigarette
effects of opium smoking in, 239
smoke-gas chromatographic analysis of tracer, dichlorbenzophenone as nonradioactive tracer for (Note), 480
Spirometer, automated wedge, normal standards for ventilatory function using, 38
Spirometry
clinical, application of desk-top computer in (Note), 615
test, effect of two instructional procedures on performance of, in children (Note), 604
Sporotrichosis, primary pulmonary (case report), 260
Sputum
physical properties of, 86
purulent, serum trypsin inhibitor capacity and (Note), 772
Swine influenza, evidence for periodicity of, in Illinois, 535
Thyroxine, effect of, on desaturated lecithin content of lung (Note), 767
Trudeau Medal award for 1972, 626
Tuberactinomycin-N, inhibition of polyphenylalanine synthesis on ribosomes of mycobacteria by (Note), 769
Tubercle bacilli, fluorescence microscopy of,

using inexpensive apparatus (Note), 706
Tuberculin
negative tuberculosis, 587
skin test
(correspondence), 282, 622
problem of "boost" effect in (Note), 118
reactions, 752
variation in sensitivity to, 202
Tuberculosis
bovine, in humans in Ontario, 528
chemotherapy of (VA Conference), 139
healed cavitary, subclavian arterial-pulmonary arterial fistula associated with (case report), 898
lymphocyte transformation as aid in diagnosis of, in patients with nonreactive skin tests, 194
meningeal, cerebrospinal fluid concentrations of rifampin in, 432
and pregnancy (correspondence), 785
primary drug-resistant, in Vietnam veterans 1967-70 (Note), 273
pulmonary
pulmonary cryptococcocis followed by (case report), 594
regional lung function in different body positions in patients with, 548
study in Hong Kong to evaluate role of pretreatment susceptibility tests in selection of regimens of chemotherapy for, 1
surveillance or control of, 897
transmitted from man to monkey, 819
tuberculin negative, 587
Tularemia treated successfully with gentamicin (case report), 265
Tumors, chondrosarcoma simulating pulmonary emboli, vascular invasion by (case report), 109
United States, current status of general hospital use for tuberculous patients in, 580
Urine, reagent-impregnated paper strip for detection of metabolic products of isoniazid in (Note), 923
Ventilatory
function
in children with cystic fibrosis and asthma, effect of nebulized bronchodilator administered with or without intermittent positive pressure breathing on, 867
normal standards for, using automated wedge spirometer, 38
lung function, factors affecting normal value for, 692
response, absence of, recurrent respiratory failure associated with, to hypercapnia and hypoxemia (case report), 100
surface, covert reduction in, in rats during prolonged exposure to subacute nitrogen dioxide, 563
Veterans
Administration—Armed Forces
Cooperative Studies in Chemotherapy of Tuberculosis, 139
Pulmonary Disease Research Conference, 31st, 125
Vietnam, primary drug-resistant tuberculosis in (Note), 273
Water droplets, inhaled (correspondence), 928
Weather, air pollution, and symptoms in urban population, 677
Will Ross Medal award for 1972, 626

INDEX OF ABSTRACTS

List of Journals Abstracted

Acta Chirurgica Scandinavica (Stockholm)
Acta Medica Scandinavica (Stockholm)
Acta Paediatrica Scandinavica (Stockholm)
Acta Pathologica et Microbiologica Scandinavica (Kobenhavn)
Acta Physiologica Scandinavica
Acta Radiologica; Diagnosis (Stockholm)
Acta Radiologica; Therapy, Physics, Biology
American Heart Journal
American Journal of Clinical Pathology (Baltimore)
American Journal of Epidemiology (Baltimore)
American Journal of the Medical Sciences (Philadelphia)
American Journal of Medicine
American Journal of Nursing
American Journal of Pathology (New York)
American Journal of Public Health (Washington)
American Journal of Surgery (New York)
Anesthesiology (Philadelphia)
Annales Chirurgiae et Gynaecologiae Fenniae (Helsinki)
Annales de l'Institut Pasteur de Lille
Annales de l'Institut Pasteur (Paris)
Annali dell'Istituto Carlo Forlanini (Roma)
Annals of Clinical Pediatrics (Athens)
Annals of Internal Medicine
Annals of Surgery (Philadelphia)
Antimicrobial Agents and Chemotherapy
Archives of Disease in Childhood (London)
Archives of Environmental Health
Archives of Internal Medicine (Chicago)
Archives of Pathology (Chicago)
Archives of Surgery (Chicago)
Archivos Argentinos de Dermatologia (Buenos Aires)
Archivos del Instituto de Cardiologia de Mexico
Australian and New Zealand Journal of Medicine
Beitraege zur Klinik und Erforschung der Tuberkulose und der Lungenkrankheiten (Berlin)
Boletin Medico Hospital Infantil (Mexico)
British Journal of Cancer
British Journal of Diseases of the Chest (London)
British Journal of Experimental Pathology (London)
British Journal of Industrial Medicine (London)
British Journal of Pharmacology (London)
British Journal of Preventive and Social Medicine (London)
British Journal of Radiology (London)
British Medical Journal (London)
Bulletin de Physio-Pathologie Respiratoire
Bulletin of the World Health Organization (Geneve)
Cancer (Philadelphia)
Canadian Medical Association Journal (Toronto)
Central African Journal of Medicine (Salisbury, Rhodesia)
Chest (Chicago)
Circulation; Journal of the American Heart Association (New York)
Circulation Research (New York)
Clinical Pharmacology and Therapeutics (St. Louis)
Clinical Radiology (London)
Clinical Research
Clinical Science (London)
Danish Medical Bulletin (Kobenhavn)
Deutsche Medizinische Wochenschrift (Stuttgart)
Duodecim (Helsinki)
Enfermedades del Torax
European Journal of Clinical Investigation
Fortschritte auf dem Gebiete der Roentgenstrahlen und der Nuklearmedizin (Stuttgart)
Ftiziologia (Romania)
Gacema Medica de Mexico
Giornale Italiano delle Malattie del Torace (Milano)
Giornale di Malattie Infettive e Parassitarie (Torino)
Grudnaia Khirurgiia (Moskva)
Gruzlica i Choroby Pluc (Warszawa)
Hoja Tisiologica (Uruguay)
Hospital (Rio de Janeiro)
Indian Journal of Chest Diseases (Delhi)
Indian Journal of Medical Research (Calcutta)
Indian Journal of Tuberculosis

Japanese Journal of Chest Disease
Japanese Journal of Clinical Radiology
Japanese Journal of Thoracic Surgery (Tokyo)
Journal of Allergy (St. Louis)
Journal of the American Medical Association (Chicago)
Journal of Applied Physiology (Bethesda)
Journal of Chronic Diseases (Oxford)
Journal of Clinical Investigation (Boston)
Journal of Clinical Pathology (London)
Journal of Experimental Medicine (New York)
Journal Francais de Medecine et Chirurgie Thoraciques (Paris)
Journal of Hygiene (Cambridge, Eng.)
Journal of the Japanese Association for Infectious Diseases (Tokyo)
Journal of Laboratory and Clinical Medicine (St. Louis)
Journal of Medical Microbiology
Journal of the National Medical Association (New York)
Journal of Pathology (London)
Journal of the Royal Institute of Public Health and Hygiene (London)
Journal of Thoracic and Cardiovascular Surgery (St. Louis)
Kekkaku (Tokyo)
Khirurgiia (Moskva)
Klinische Wochenschrift (Berlin)
Korean Medical Abstracts
Laboratory Investigation (New York)
Lancet (London)
Lille Medical
Medical Clinics of North America (Philadelphia)
Medical Journal of Australia (Sydney)
Military Medicine (Washington)
Minerva Medica (Torino)
Neumologia y Cirurgia del Torax
New England Journal of Medicine (Boston)
New Zealand Medical Journal (Wellington)
Nursing Research
Pathologia et Microbiologia (Basel)
Pediatrics (Springfield, Ill.)
Pharmacologia Clinica
Pneumonologie
Polski Przeglad Chirurgiczny (Warszawa)
Polskie Archiwum Medycyny Wewnetrznej (Warszawa)
Poumon et le Coeur
Praxis der Pneumologie vereinigt mit der Tuberkulosearzt (Stuttgart)
Prensa Medica Argentina (Buenos Aires)
Problemy Tuberkuleza (Moskva)
Public Health Reports (Washington)
Publicaciones Inst. Antituberculoso (Spain)
Radiology (Syracuse)
Respiration and Circulation
Respiration; International Review of Thoracic Diseases (Basel)
Respiration Physiology
Respiratory Therapy
Revista Brasileira de Medicina (Rio de Janeiro)
Revista Clinica Espanola (Spain)
Revista do Instituto de Medicina Tropical de Sao Paulo
Revista Facultad de Medicina (Mexico)
Revista Latinoamericana de Microbiologia y Parasitologia (Mexico)
Revista do Servico Nacional de Tuberculose (Rio de Janeiro)
Revue de Tuberculose et de Pneumologie (Paris)
Rev. Tuberc. Sanat. Belem.
Romanian Medical Review (Bucuresti)
Scandinavian Journal of Infectious Diseases
Scandinavian Journal of Respiratory Diseases (Kobenhavn)
Scandinavian Journal of Thoracic and Cardiovascular Surgery (Stockholm)
Science (Washington)
Scottish Medical Journal
Selected Papers of the Royal Netherlands Tuberculosis Association
Semaine de Hopitaux de Paris
Surgery (St. Louis)
Surgery, Gynecology and Obstetrics (Chicago)
Torax (Montevideo)
Thorax (London)
Tisiol. Pneumol.
Tubercle (London)
Tuberkuloz (Istanbul)
Tuberkuloz ve Toraks
Tuberkulozis es Tudobetegsegek (Budapest)
Turkish Journal of Pediatrics (Ankara)
Union Medicale du Canada
Wiadomosci Lekarskie (Warszawa)
Wiener Klinische Wochenschrift
Wiener Medizinsche Wochenschrift
Yale Journal of Biology and Medicine (New Haven)
Zeitschrift Fur Erkrankungen der Atmungsorgane Mit Folia Bronchologica (Leipzig)

Index of Abstracts-Authors

Abram, H. S., 152
Adachihara, K., et al, 658
Adams, W. C., et al, 507
Adiseshan, N., 319
Agarwal, K. C., 152
Agarwal, S. C., et al, 158
Agostoni, E., et al, 165
Aho, K., 354
Aizawa, Y., et al, 664
Ajmani, N. K., et al, 497
Akerkar, A. S., et al, 657
Akiyama, S., et al, 349
Alakultju, K., 353
Aristizabal, S. A., et al, 510
Armand, A., et al, 669
Armasu, C., et al, 161
Aronow, W. S., et al, 337
Arseth-Hansen, P., 324
Asnani, P. J., et al, 499
Assor, D., 803
Atuk, N. O., et al, 176
Auerbach, O., et al, 501

Baba, H., et al, 794
Bachynski, J. E., 172
Bake, B., et al, 505
Ballestero, R. J., 511
Barnhard, H. J., 170
Baron, M. G., 168, 333, 344
Barton, C. J., et al, 813
Bass, H., 340, 797
Batime, J., et al, 802
Batson, G., et al, 812
Beaty, H. N., 335
Belgrad, R., 344
Bender, M. A., et al, 502
Benoit, P. R., et al, 334
Berecek, K. H., et al, 511
Bergman, I., et al, 655
Berman, I. R., et al, 333
Bernadou, M., et al, 654
Berrino, F., et al, 500
Bhole, M. V., et al, 810
Biggar, W. D., et al, 153
Birnbaum, W., et al, 175
Biron, D. J., et al, 661
Birta, L., et al, 173
Bisgard, G. E., 338
Blank, N., 509
Bledsoe, F. H., 663
Blumenthal, B. I., et al, 802
Bobrowitz, I. D., 814
Bodey, G. P., et al, 795
Bodner, S. J., 496
Booij-Noord, H., et al, 152
Borden, K. S. O. S., IV, et al, 170
Bottger, E., et al, 168
Boughard, R. J., et al, 340
Bougot, K. R., et al, 330
Bourke, G. J., et al, 504
Boutin, C., et al, 815
Boyles, P. W., 805
Bran, J. L., et al, 652
Branders, E., 354
Brandi, G., 665
Breining, H., 332
Breslin, A. B. X., 815
Brown, A. S., 157
Brum, J., et al, 335
Bungert, H., et al, 332
Burrows, B., et al, 497
Burrows, B. D., 343
Burrows, D. C., et al, 813
Buruch, G. E., 337
Byrne-Quinn, E., 337

Caceres, J., 329
Cade, J. F., 339
Calinog, T. A., et al, 347
Camarata, S. J., et al, 161
Campobasso, O., et al, 500
Capitanio, M. A., et al, 509
Carr, D. T., et al, 153
Casali, L., et al, 654
Castellino, R. A., et al, 170, 509
Cha, E. M., et al, 508, 670
Chahinian, P., 660
Chait, A., et al, 171, 812
Chalon, J., et al, 162
Cherniack, N. S., et al, 166
Chiang, S. T., 167
Chinet, A., et al, 165
Chretien, J., et al, 661
Christensen, F., 324
Christensen, S. B., 324
Civetta, J. M., et al, 814
Clarke, S. W., et al, 811
Clausen, G., et al, 166
Clement, J., et al, 667
Clements, J. A., 336, 499
Cleaveland, G. R., et al, 808
Cobbin, D. M., 323
Cocking, J. B., 339
Cohen, L., 172
Colebatch, J. H., 321
Colgan, F. J., et al, 498
Cooper, I. A., et al, 329
Cooperative Study Unit of Chemotherapy of Tuberculosis of National Sanatoria in Japan, 652, 794
Corsini, R. J., 328
Cotes, J. E., et al, 666
Craig, D. B., et al, 810
Cullen, J. H., et al, 498
Cuparescu, P., et al, 159
Cuschieri, A., et al, 806
Cushard, W. G., Jr., et al, 321

DaCosta, J. L., 340
Danilowicz, D. A., et al, 341
Darke, C. S., 339
Davidson, J. K., et al, 664
Davies, C. T. M., 507
Davis, J. M. G., 807
Dawson, S. V., et al, 666
Decroix, G., et al, 653
Degand, P., et al, 660
DeHoratius, R. J., et al, 332
Delepierre, F., et al, 319
DeRemee, R. A., et al, 497
Desautels, D., et al, 350
Deutsch, V., 345
Dharams, D. S., et al, 506
Dixon, J. M. S., et al, 659
Dolan, C. T., 801
Don, H. F., et al, 164, 813
Donovan, J. K., 346
Dornetzhuber, V., et al, 161
Dotter, C. T., et al, 324
Dressler, D. P., et al, 336

Dugdale, A. E., et al, 164
Dunham, P. B., et al, 334
Durocher, J., 330
DuSault, L. A., 173

Eckert, H. L., et al, 664
Edwards, J. H., 499
Edwards, R. H. T., et al, 341
Eldredge, W. J., et al, 341
El Hassan, A. M., 321
Elliott, F. M., 323
Ellison, N., et al, 154
El-Sadik, Y. M., et al, 656
El-Said, G., et al, 814
Endo, S., et al, 809
Eng, J., et al, 158, 159
Engzell, U., et al, 160
Erikson, U., et al, 175

Fass, R. J., et al, 156
Federman, M. J., et al, 164
Feigelson, J., et al, 502
Fekete, F., et al, 164
Felix, R., et al, 168
Felman, A. H., et al, 670
Felson, B., 329
Feltis, J. M., Jr., et al, 353
Fenley, D. C., et al, 661
Fillmore, S. J., et al, 505
Finkel, J. M., et al, 503
Finley, T. N., et al, 336
Fishman, D. B., et al, 155
Fleishman, R. W., et al, 157
Fleming, W. H., et al, 672
Flenley, D. C., 665
Fletcher, D. E., 656
Fletcher, G. H., et al, 672
Fletcher, K., et al, 799
Flowers, N. C., 661
Forbes, J. F., et al, 502
Forrest, J. V., 669
Forrest, W. H., Jr., et al, 337
Fossati, C., 652
Freedman, S., et al, 506
Friedli, B., et al, 351
Friedman, G. D., et al, 328
Furgang, F. A., et al, 347

Gallouedec, C., et al, 660
Gamble, J. L., Jr., et al, 666
Gandevia, B., 319
Garcia, J. B., et al, 348
Gault, J. H., et al, 340
Gayrard, P., et al, 663, 668
Genoe, G. A., et al, 336
Gentry, L. O., 504
Gianturco, C., 171
Giron, J., et al, 658
Giustra, P. E., et al, 175
Glenn, W. W. L., et al, 343
Godard, J. E., et al, 164
Godfrey, S., et al, 667
Goldberg, A. N., et al, 337
Goldberg, B. B., 171, 351
Goldman, A. L., et al, 795
Goldman, S. M., et al, 510
Goldschlager, N., et al, 349
Gollan, J. L., et al, 333
Goodrich, J. K., et al, 668
Gottschalk, A., et al, 813
Governa, M., et al, 655
Govindaraj, M., 797
Gradiner, A. J. S., 338
Graham, T. P., Jr., et al, 332
Grant, C. A., et al, 344
Green, G. R., et al, 799
Green, W. F., 799
Greenfield, L. J., et al, 174
Grieco, M. H., 800
Grillo, I. A., 160
Grosset, J., et al, 353
Grover, R. F., 337
Gupta, S. K., et al, 811
Gurwith, M. J., et al, 175
Gyselen, A., 496

Habal, M. B., et al, 511
Habibulla, K. S., et al, 154
Hage, E., 803
Hall, R. M., et al, 664
Hanham, I. W. F., et al, 160
Hansen, H. H., et al, 155
Hapke, E. J., et al, 342
Hara, K., et al, 344
Hargreave, F., et al, 670
Harlin, V. K., 499
Harrington, J. S., et al, 157, 163
Harris, J., 323
Harrold, A. J., et al, 504
Hauge, B. N., 340
Heath, D., et al, 154
Heine, F., 159
Heitzman, E. R., et al, 168, 171, 671
Heller, R. M., et al, 170
Herrmann, E. C., Jr., 801
Herter, F. P., et al, 502
Heyden, S., et al, 156
Hill, J. D., et al, 349
Hiller, E., et al, 797
Hillis, W. D., et al, 176
Hiraga, Y., et al, 334
Hirata, M., et al, 345
Hobday, J. D., 325
Hodges, N. C., et al, 154
Hoeffel, J. C., et al, 510
Hollander, B. A., et al, 669
Holst, J., 353
Horiot, J.-C., et al, 672
Hsu, J. T., et al, 509
Huet, M., et al, 158
Hughes, J. M., 797
Hultgren, H. N., et al, 339
Hunt, P. S., et al, 511
Hurlburt, W. B., 350
Hutchins, P., et al, 351

Iben, A. B., et al, 174
Ilbery, P. L. T., 346
Iles, R. A., et al, 506
Ingram, R. H., et al, 810
Isawa, Y., et al, 326
Ishihara, H., 803
Itano, R., et al, 661
Ito, Y., et al, 169
Iwazaki, T., 669

Jaffe, B. F., 511
Jagueux, M., et al, 660
Jain, S. K., et al, 508
Janower, M. L., et al, 169
Jansson, S., 354
Jayant, J., et al, 498
Jenkins, D. E., 157
Jenne, J. W., et al, 662
Jha, V. K., et al, 813
Johanson, W. G., Jr., et al, 326
John, T. J., et al, 352
Jones, J. G., et al, 654
Jones, M. C., 161
Jones, S. E., et al, 672
Jordan, M. C., et al, 153

Kafer, E. R., et al, 667
Kafura, P. J., 170

Kahanpää, A., 805
Kameda, K., et al, 798
Kammler, E., et al, 344
Kampmann, J., et al, 808
Kaplan, H. W., 501
Kark, A. E., et al, 500
Kass, I., 796
Kato, M., 661
Kazem, I., et al, 326
Keene, R. J., et al, 343
Kelley, W. N., et al, 318
Kellner, G. A., et al, 507
Keltz, H., et al, 797
Kihara, I., 806
Kihara, K., 354
Kikuchi, H., et al, 795
Kirks, D. R., et al, 510
Kitahata, L. M., et al, 174
Kitamura, H., et al, 341
Kjellman, B., 322
Kjer, J., 324
Klastersky, J., et al, 318, 652
Klemola, E., et al, 800
Kobayashi, N., et al, 668
Koenig, M. G., 496
Kohout, E., et al, 502
Kohout, J., 335
Koizumi, H., et al, 802
Kondo, A., et al, 318, 338
Konishiike, J., et al, 331
Kox, M., et al, 327
Koya, G., et al, 804
Krumholz, R. A., et al, 812
Kundel, H. L., et al, 671
Kurnick, J. E., 659
Kuramitsu, H., et al, 320
Kwak, D. L., et al, 168

Lane, S. D., 170
Lanese, R. R., et al, 809
Lanuza, A., 169
LeBroux, B. T., et al, 153
Lee, J., et al, 510
Lee, J. Q., 354
Lee, L. H., 508
Lefrancois, R., et al, 505
Lenfant, C., et al, 166
Le Roux, B. T., 347
Lessin, L. S., et al, 336
Levin, K. J., et al, 170
Levison, M. E., et al, 657
Liander, B., et al, 164
Lieberman, P., et al, 798
Lillington, G. A., et al, 153, 663
Linsk, J. A., et al, 813
Lo Gerfo, P., et al, 502
Lorian, V., 152
Lowe, C. R., et al, 324
Ludington, L. G., et al, 802
Luepker, R., et al, 164
Lynne-Davies, P., et al, 672
Lyons, H. A., et al, 798

Macleod, W. M., et al, 321
MacMillan, A. S., et al, 174
Magnus, K., et al, 159
Mahgoub, E. S., 321
Maisel, J. C., et al, 805
Makela, V., 353
Malsky, S. J., et al, 172
Marine, W. M., et al, 663
Marshall, R., 327
Martinez-Bordiu, C., et al, 330
Matsuba, K., et al, 804
Maung, T., et al, 350
Mayron, L. W., et al, 658
McAllister, V., 345
McArthur, J. D., et al, 166
McConn, R., et al, 342
McClelland, A. R., et al, 665
McCort, J. J., 500
Medici, T. C., et al, 501
Medoff, G., et al, 319
Meighan, J. W., 660
Meng, C.-H., 168
Meyer, A., et al, 674
Michenfelder, J. D., et al, 351
Miller, R. E., 344
Milne, J. S., et al, 508
Miskovits, G., et al, 169
Misuraca, L., et al, 348
Mitenko, P. A., et al, 504
Modee, J., et al, 503
Monod, O., 814
Moore, R., et al, 323
Morgan, J. R., 511
Mortazavi, S. H., 343
Moss, E., et al, 327
Mostafavi, H., et al, 173
Muckle, D. S., et al, 503
Muir, V. Y., 172
Mulder, D. G., et al, 350
Mullin, M. J., et al, 349
Mullins, C. E., et al, 814
Murata, A., et al, 673, 674

Nagrath, S. P., et al, 802
Naito, M., 815
Nakashima, H., 352
Narang, R. K., 500
Nasser, W. K., et al, 659
Naughton, J., et al, 152
Neff, T. A., 328, 508
Neitzschman, H. R., et al, 344
Neumann, H. H., 505
Newhouse, M. L., et al, 656
Newens, A. F., 173
Nickels, J., et al, 803
Nishijo, T., et al, 322
Nitscheff, W., et al, 331
Noble, M. I. M., et al, 342
Noble, R. C., et al, 806
Norris, J. R., et al, 173
Nylen, O., et al, 816

Ogawa, M., et al, 799
Ohba, S., et al, 802
Ohsato, T., et al, 662
Okaya, Y., 796
Olson, D. E., et al, 667
Oreopoulos, L. G., et al, 353
Orfanakis, M. G., et al, 657
Orie, N. G. M., et al, 152
Orringer, M. B., et al, 348
Osato, T., et al, 794
Oswald, N. C., et al, 160

Pain, M. C. F., 339
Pain, M. C. F., et al, 325
Palmer, A., et al, 167
Palos, B., et al, 173
Pande, J. N., et al, 167
Paolini, P., 673
Papatestas, A. E., et al, 500
Papers Presented at the International Congress of Physiological Sciences Satellite Symposium, 664
Pariente, R., et al, 333
Park, C. H., et al, 805
Parker, D. J., et al, 672
Parker, J. C., et al, 336
Patiala, J., 354
Pearl, M., et al, 170

Pedley, T. J., et al, 667
Pernot, C., et al, 510
Perraud, R., et al, 661
Peslin, R., et al, 665
Petty, T. L., 508
Philip, I., et al, 811
Phillis, J. A., et al, 504
Poe, R. H., et al, 803
Pooley, F. D., 655
Postlethwaite, A. E., et al, 318
Potchen, E. J., 169
Potdar, G. G., 329
Potter, C. W., et al, 807
Pournaras, N. D., et al, 342
Poznanski, A. K., et al, 170
Prakash, O., 162
Pryor, D. S., 321
Psiloinis, M. P., 323
Pump, K. K., 332

Quaife, M. A., 796

Rabinovich, S., 658
Rabinowitz, J. G., et al, 671
Radics, J., et al, 169
Ranasinha, K. W., et al, 655
Rao, K. V. N., et al, 163
Rao, P. S., et al, 165
Rao, S., et al, 654
Rebuck, A. S., 323
Rebuck, A. S., et al, 322
Regamey, C., et al, 662
Regan, G. M., et al, 156
Rehder, K., et al, 174
Reicher-Reiss, H., 345
Reiss, E., et al, 321
Reiss, K.-H., et al, 507
Remington, J. S., 504, 797
Remington, J. S., et al, 175
Richerson, H. B., 806
Richman, S., et al, 663
Riemer, R. W., 512
Riesco, A., et al, 162
Roberts, G. H., 332
Roberts, W. C., et al, 660
Robertson, C. L., et al, 153
Robertson, M. A., et al, 157, 163
Robin, E. D., et al, 800
Robinson, W. A., 659
Rodarte, J. R., et al, 334
Rogers, R. M., et al, 798
Roghai, G. D., 349
Rose, E. F., 804
Rosillo, R. H., et al, 155
Rossiter, C. E., 325
Rubenstein, B., 345
Rubin, J. W., et al, 503
Ruiz, U., et al, 510
Ruskin, J., 504
Russell, E., et al, 500
Ryser, G., et al, 809
Ryskjaer, S., 324

Saha, N. C., et al, 796
Saito, H., et al, 352
Salkin, I. F., et al, 657
Sarkar, B. B., et al, 165
Sarrat, H., et al, 673
Sassy-Dobray, G., et al, 159
Schapiro, R. L., et al, 659
Scheibel, R. L., et al, 509
Scherer, D., 508
Schettini, A., et al, 339
Schonell, M., 799
Shimode, H., 673
Schneiderman, L. J., et al, 328
Schoenbaum, S., et al, 171
Schreiner, A., et al, 806
Schweiger, O., 162
Scott, K. W. M., 332
Sears, M. R., et al, 172
Seaton, A., et al, 155, 326, 342, 498
Secker-Walker, R., 169
Sen, P. K., et al, 808
Seymour, E. Q., 663
Shabanah, F. H., et al, 331
Shadomy, S., 652
Shah, J. R., et al, 808
Shand, D. G., et al, 808
Sharma, O. P., 512
Shawker, T. H., et al, 801
Sheehy, A. F., et al, 798
Shivpuri, D. N., et al, 156
Sicevic, S., 352
Siljander, T., 353
Silvers, G. W., et al, 810
Simberkoff, M. S., et al, 162
Simon, G., 665, 813
Simon, J. L., 659
Simpson, J., 319
Sissman, J., et al, 165
Smith, J. W., et al, 500
Soejima, R., et al, 345
Solomon, H. M., et al, 338
Spear, G. S., 806
Spence, M., et al, 323
Spencer, C. D., 335
Stanley, P., et al, 351
Staszewski, J., et al, 498
Steele, R. W., et al, 669, 799
Sterling, T. D., et al, 327
Stone, D. J., et al, 797
Stossel, H. G., et al, 330
Strunge, P., 331
Subramanian, S., et al, 796
Sudlow, M. F., et al, 667
Suhrland, L. G., et al, 807
Sullivan, R. J., Jr., et al, 663
Sunahara, S., 795
Sutaria, M. K., et al, 669
Sutherland, G. R., et al, 167
Sutter, R. D., et al, 348
Svanes, K., 160
Svenningsen, N. W., et al, 335
Swartz, J. H., et al, 804

Takahashi, K., 653, 811
Takato, M., et al, 809
Takeda, I., et al, 806
Tamura, A., et al, 816
Taplin, G. V., et al, 326
Tasaka, H., et al, 815
Tateishi, T., et al, 329
Taylor, B., 323
Thiede, W. H., et al, 347
Thilenius, O. G., et al, 506
Thind, K. S., 499
Thomas, G. O., 161
Thomas, M. L., 345
Thomas, R. J. S., 350
Tonge, K., 345
Torrance, J. D., et al, 166
Toyohara, M., 794
Toyohara, M., et al, 352
Trenchard, D., et al, 503
Tsukamura, M., et al, 318, 328, 653, 658, 662, 801
Tunnell, W. P., et al, 346
Turiaf, J., et al, 320
Turner, D. A., et al, 813

Ulrich, P., 161
Umine, Z., 815

Unterman, D. H., et al, 804
Uragoda, C. G., et al, 325
Uthgenannt, H., et al, 168

Vale, J. R., 322, 324
Van Arsdel, P. P., Jr., et al, 153
Variakojis, D., et al, 501
Veith, F. J., et al, 346
Verdier, F., et al, 667

Wanner, A., et al, 512
Warren, K. S., 504
Weidner, W. A., et al, 171
Weisfeiler, G., et al, 158
Weiskopf, R. B., et al, 163
Wenzel, F. J., et al, 801
Westcott, J. L., 508, 670
Whitney, B., et al, 812
Will, J. A., 338
Williams, R. C., Jr., et al, 332
Willson, J. K. V., et al, 175
Wishart, D. L., 812
Wright, F. W., et al, 671

Yamamoto, K., et al, 653
Yamasaki, M., et al, 346
Yamazaki, M., 318
Yoshizawa, H., et al, 653
Young, D. A., 665
Yu-Shen Lai, D., et al, 805

Zapol, W. M., et al, 347
Zarembok, I., et al, 509
Zborowskasluis, D. T., et al, 163
Zeidler, D., et al, 159

Abrams' punch needle biopsy, 815
Abscess, amoebic liver, cavernogram for diagnosis of, 811
Acetazolamide, reversal of hyperventilation-induced hyperlactatemia by, 163
Adenocarcinoma. *See* Tumors
Adenopathy, normal anatomy and distortions produced by, 509
Adenosine triphosphatase and active cation transport in red blood cell membranes, 334
Aerosol (s)
  inhalation, electrical sequelae of, 660
  isoproterenol-phenylephrine and salbutamol, effect of, on blood gases, ventilation, and perfusion in chronic bronchitis with asthma, 323
  salbutamol, inhaled, oral salbutamol as supplement to, in obstructive respiratory disease, 342
Africa, cancer pattern in gold miners in, 157
Africans
  Black, tuberculosis due to *M. africanum* in, in Paris, 353
  cancer pattern in
    at Baraguanath Hospital, Johannesburg, 163
    of Transvaal Lowveld, 163
Age, oxygen-transporting system in relation to, 507
Aged
  men, lung cancer risk in, 330
  patients with pulmonary tuberculosis, electrocardiogram study of, 673, 674
  people, respiratory function tests in, 508
Agenesia, lobar, in infantile lobar emphysema, 331
Airflow, factors affecting, through branched tubes, 811
Air-trapping in children, lateral decubitus film as aid in determining, 509
Airway (s)
  carcinoma of, cytological diagnosis preceding diagnosis of, 660
  central, some aspects of physics of flow in, 667
  closure
    gas trapping, and functional residual capacity during anesthesia, 813
    and lung volumes during breathing with maintained airway positive pressures, 810
  conductance, effects of single forced inspiration on, 668
  disease, chronic obstructive, in asbestos workers, importance of clinical, radiologic and pulmonary function variables in evaluating, 156
  human, prediction of distribution of oscillatory flow in, 666
  obstruction
    effect of diphenylhydantoin on ventilation tests, in 808
    small, blood gas transfer after, in dog and minipig, 661
  resistance
    central, in excised emphysematous lungs, 810
    in normal and asthmatic children, effect of intermittent positive-pressure breathing on, 323
  small, number and dimensions of, in emphysematous lungs, 804
Alpha$_1$-antitrypsin deficiency and pulmonary emphysema, 161
Altitude (s)
  high, oxygen transport mechanism in residents at, 166
  low and high, chemoreflex ventilatory response to CO_2 in man at, 505
Alveolar
  and capillary volumes after intracardiac surgery, 672
  carbon dioxide tension, effect of nitrous oxide on, 174
  cell bronchiolar carcinoma as another great imitator, 802
  cells, fatty degeneration of, 332
  changes of patients with bronchial asthma, 344
  fluid, pulmonary, delayed resorption of, in neonate, 669
  manifestation of rejection in human lung transplantation, 346
  microlithiasis, pulmonary, 172
  wall, ultrastructure of, in experimental paraquat poisoning, 503
Alveolitis, allergic, radiological appearances of, in bird fancier's lung, 670
Alveolopathy, oxygen, in adults, 664

Aminoglycoside antibiotic (tobramycin), *in vitro* evaluation of, 657
Aminophylline, adjustment of clinical dose of, and pharmacokinetics of theophylline, 662
Aminorex and amphetamine
effects of, on pulmonary and systemic hemodynamics in calf, 337
oral, hemodynamic effects of, in unanesthetized beagle dogs, 338
Ammonia retention by smokers, 157
Amniotic fluid, risk of respiratory-distress syndrome by rapid test for surfactant in, 499
Amphetamine and aminorex
effects of, on pulmonary and sytemic hemodynamics in calf, 337
oral, hemodynamic effects of, in unanesthetized beagle dogs, 338
Ampicillin and sulfonamides, *in vitro* studies of combined effect of, on *Nocardia asteroides*, 657
Anaemia, iron-deficiency, effect of, on transfer factor for lung diffusing capacity and ventilation and cardiac frequency during sub-maximal exercise, 666
Anesthesia
airway closure, gas trapping, and functional residual capacity during, 813
general
accidental intra-arterial injection of promethazine HCl during, 173
muscle paralysis, and mechanical ventilation, effects of, on pulmonary nitrogen clearance, 174
spinal, pulmonary embolism following, 173
Aneurysm
aortic root, radiographic and pathologic features of, 343
of thoracic aorta, 153
Angina pectoris, carboxyhemoglobin caused by smoking non-nicotine cigarettes and its effects in, 337
Angiography. *See* Roentgenology
Antibiotics, mode of action of, on gram-negative bacilli, 152
Antibodies
complement-fixing and immunofluorescent, to *Mycoplasma pneumoniae* in sera from normal community, 158
toxoplasma, incidence of, in tuberculous patients, 162
Antigen (s)
HL-A, in patients with Hodgkin's disease and their families, 502
immune precipitation of not cell-bound, of *Mycoplasma pneumoniae*, 158
not cell-bound, immune electron microscopy of, of *Mycoplasma pneumoniae*, 158
tumor associated, with pulmonary neoplasms, 502
Aorta, thoracic, aneurysms of, 153
Aortic arch
right, 333
ultrasonic measurement of, 171
Arteriography. *See* Roentgenology
Artery (ies)
aberrant left pulmonary, 811
bronchial, angiography of, in primary pulmonary neoplasma, 668
left pulmonary, from ascending aorta in tetralogy of Fallot, 511
main and branch, physiologic pressure differences between, in infants, 341
right pulmonary, ultrasonic measurement of, 171
technique to facilitate the introduction of vascular catheters into, 813
Asbestos
body coating, histochemical study of, 655
fibre, chrysotile, electron microscope characteristics of inhaled, 655
workers
female, study of mortality of, 656
importance of clinical, radiologic and pulmonary function variables in evaluating chronic obstructive airway disease in, 156
Asbestosis, importance of clinical, radiologic and pulmonary function variables in evaluating, 156
Ascaris—a practical joke?, 504
Ascaris suum infestation in man, pulmonary infiltrates, asthma and eosinophilia due to, 504
Ascites simulating subpulmonary pleural effusion, 170
Ascorbic acid, utility of, in tetracycline therapy, 497
Asia, Southeast, philosophy and policy in chemotherapy of tuberculosis in, 795
Aspergilloma. *See* Tumors
Aspergillosis. *See* Mycoses
Aspergillus. *See* Fungi
Aspiration
fulminant hydrocarbon, corticosteriods and antibiotics for treatment of, 799
thin needle cytologic, diagnosis of intrathoracic tumors by, 813
transducer, ultrasonic, 351

transtracheal
complications of, 335
in diagnosis of lower respiratory tract infections, 806
Asthma
association of, with *aspergillus* and other fungi, 319
bronchial
alveolar changes of patients with, 344
electrocardiographic findings in, 320
lung function in children with, 322
children with
disodium cromoglycate in, 323
effect of intermittent positive-pressure breathing on airway resistance in, 323
incidence of pollen sensitivities on skin test and bronchial challenge in, in Perth, Western Australia, 325
with chronic bronchitis, effect on blood gases, ventilation, and perfusion of isoproterenol aerosols in, 323
complications of long-term steroid therapy for, 798
current status of deaths from, 796
occupational, bronchial reactivity in, 325
propranolol test for provoking, 663
pulmonary infiltrates, and eosinophilia due to *Ascaris suum* infestation in man, 504
severe chronic, evaluation of azathioprine in, 154
Atresia, pulmonary valve, with intact ventricular septum, 166
Atrium, left, ultrasonic measurement of, 171
Atrophy, bronchial, significance, of, 805
Atropine, effects of, on standardized isoproterenol sensitivity test, 808
Australia
Polish migrants to, cancer mortality in, 498
Western, incidence of pollen sensitivities on skin test and bronchial challenge in asthmatic children in, 325
Autopsy protocols and pathology reports, 804
Azathioprine, evaluation of, in severe chronic asthma, 154
Azygos
continuation of inferior vena cava, useful sign in, 170
vein
and its pleural reflections, 168, 171
width, normal in children, 812

Bacilli, gram-negative, mode of action of antibiotics on, 152
Bagassosis, pulmonary functional derangements in, 157
BCG vaccination and cost-benefit analysis of medicare, 809
Beaver, blood O_2 and acid-base changes in, during submersion, 166
Bengal, West, respiratory syncytial virus infection in children in, 176
Biopsy
Abrams' punch needle, 815
aspiration, investigation on tumor spread in connection with, 160
bronchial brush, diagnosis of Hodgkin's disease by, 501
percutaneous trephine, of lung, 328
pleural, new reliable instrument for, 511
pulmonary needle aspiration, spring suctioning device for, 175
transbronchial, of benign and malignant peripheral lung lesions, 175
Bird fancier's lung, radiological appearances of allergic alveolitis due to, 670
Bisolvon. *See* Bromhexine
Blastomycosis. *See* Mycoses
Bleomycin
-induced interstitial pneumonia in dogs, 157
pneumonitis, 809
clinicopathological study of, 318
Blood
cell membranes, red
adenosine triphosphatase and active cation transport in, 334
ultrastructure of normal and hemoglobinopathic, 336
cells
red, pathological alteration of cation movements in, 336
white, cell respiration of guinea pigs inoculated with, of pulmonary sarcoidosis patients, 162
effect of some drugs on penicillin half-life in, 808
gas
changes and pulmonary hemodynamics following acute myocardial infarction, 505
transfer after small airway obstruction in dog and minipig, 661
gases
effect on, of isoproterenol-phenylephrine and salbutamol aerosols in chronic bronchitis with asthma, 323
and pulmonary mechanics, effects of ultrasonic nebulization on, in obstructive pulmonary disease, 654

hemoglobin O_2 equilibrium, absence of effect of halothane on, *in vitro*, 163
inhibitory effect of heparin on gentamicin concentrations in, 662
levels of rifampicin following administration before or after breakfast, 662
loss, volume of, and pulmonary resection, 349
mammalian, respiratory functions of, 505
O_2 and acid-base changes in beaver during submersion, 166
respiratory function of, 342
volume
pulmonary capillary, and effect of oral contraceptives in women, 342
studies in chronic obstructive nonspecific lung disease, 339
Brain
damage, anoxic, after cardiac resuscitation, 173
surface pressure, response of, to hypercapnic hypoxia and hyperventilation, 339
Breast, carcinoma of, urinary hydroxyproline excretion in, 806
Breathing
constant and intermittent positive-pressure, cardiorespiratory effects of, 498
intermittent positive-pressure, effect of, on airway resistance in normal and asthmatic children, 323
patterns and regional ventilation distribution in tetraplegic patients and in normal subjects, 505
rapid shallow, role of pulmonary vagal afferent nerve fibres in development of, in lung inflammation, 503
sensation produced by threshold resistive loads to, 342
Breuer-Hering reflex, functional importance of, 665
Bromhexine, mucolytic agent, in chronic lung disease, 323
Bronchi
abnormal, two pairs of family members with, 804
main, selective blind catherization of, 350
traumatic rupture of, pulmonary function following, 672
Bronchial
brushing technique, diagnosis of pulmonary aspergillosis by, 336
disease, chronic, sputum cell dynamics in bacterial exacerbations of, 501
reactivity, its measurement and clinical significance, 339
Bronchiectasis, pulmonary ventilation and gas exchange in, 167
Bronchitis
chronic
with asthma, effect on blood gases, ventilation, and perfusion of isoproterenol-phenylephrine and salbutamol aerosols in, 323
correlation of regional densitometry patterns, radiological appearances, and pulmonary function tests in, 167
in ex-coal miners working in steel industry, 324
mulcolytic treatment of during two winter periods, 324
nebulization of saline and isoproterenol in, 797
mortality of newspaper workers from lung cancer and, 327
Bronchodilator Th 1165a, 322
Bronchofiberoscopy, bedside, technique for, 512
Bronchography. *See* Roentgenology
Bronchopulmonary-goregut malformation, congenital, 170
Bypass, cardiopulmonary, patterns of myocardial oxygen and lactate extraction in patients undergoing, 349
Byssinosis, study of lung function changes among different grades of, 656
Caffeine, interaction of, with pentobarbital as nighttime hypnotic, 337
Calf, effects of aminorex and amphetamine on pulmonary and systemic hemodynamics in, 337
Calorimetry, study by direct, of thermal balance on first day of life, 809
Cancer
distribution of, in endogamous groups in Western India, 498
and fibrosis, relation between, of lung of rats treated with N-methyl-N-nitrosourethane, 661
lung
diagnostic evaluation of ^{67}Ga scanning of, 169
induced by inhaled radon on rats, 661
mortality of newspaper workers from, 327
problems associated with mass examination of, 669
pulmonary scintigraphy using radioactive $HgCl_2$-glutathione in, 345
risk in older men, 330
395 cases of, 329
in U.S. since 1955, 327

metastatic
lung, radiographic findings of, 345
lymphangitic spread of, to lung, 169
mortality in 1962-66 among Polish migrants to Australia, 498
patients
mucopolysaccharides in peripheral leucocytes of, 162
variability of individual tolerance to methotrexate in, 155
pattern
in African gold miners, 157
in Africans
at Baragwanath Hospital, Johannesburg, 163
of Transvaal Lowveld, 163
primary lung, diagnosis of, by sputum cytology, 160
risk and tuberculin allergy, 159
vocal-cord, analysis of failures in early, 672
Candidiasis, systemic, a diagnostic challenge, 797
Cannulation, peripheral, prepulmonary oxygenation by, for respiratory distress, 174
Capillary
and alveolar volumes after intracardiac surgery, 672
leak syndrome with pulmonary edema, 800
Carbenicillin and gentamicin, *in vitro* combined activity of, on *P. aeruginosa,* 152
Carbon dioxide
changes, arterial, during voluntary hyperventilation in chronic obstructive pulmonary disease, 810
chemoreflex ventilatory response to, in man at low and high altitudes, 505
effects of added elastic loads to respiratory response to, in man, 506
tension
alveolar, effect of nitrous oxide on, 174
intracellular buffering in dog at varying, 666
mixed venous, rebreathing methods of measuring, during exercise, 667
Carbon monoxide
and oxygen pulmonary diffusing capacity estimates, inhomogeneity on, by steady-state methods, 165
poisoning, respiratory insufficiency associated with, 799
Carboxyhemoglobin caused by smoking nonnicotine cigarettes and its effects in angina pectoris, 337
Carcinoma. *See* Tumors
Carcinosarcoma. *See* Tumors
Cardiac. *See* Heart
Cardiorespiratory
effects of constant and intermittent positive-pressure breathing, 498
responses and multistage treadmill walking performance of middle-aged men, 507
Cardiovascular dysfunction, patterns of, in chronic obstructive lung disease, 497
Carzinochrom reaction in respiratory disease, 334
Catheterization
blind, selective, of main bronchi, 350
bronchial, selective, 347
cardiac, radiation exposure to personnel during, 172
ventriculoatrial shunt, collateral circulation in superior vena caval obstruction following, in hydrocephalus, 508
Catheters
arterial, constant-pressure irrigation for, 348
percutaneous placement of, to monitor central venous pressure, 507
vascular technique to facilitate the introduction of, into arteries and veins, 813
Cation
movement in red blood cells, pathological alterations of, 336
transport, active, and adenosine triphosphatase in red blood cell membranes, 334
Cavernography. *See* Roentgenology
Celestin tube intubation, radiologic aspects of, for incurable obstructive esophageal carcinoma, 500
Cell (s)
malignant, selective inhibitory effect of hyperthermia on metabolism and growth of, 503
population kinetic model for fractionated radiation therapy, 172
Cephalosporin, parenteral, 496
Cephapirin, clinical and *in vitro* evaluation of, 496, 652
Chemodectoma. *See* Tumors
Chemoreflexes, lung, search for evidence of, in man, 508
Chemotherapy. *See also* individual drugs
antifungal, what's new in, 652
combination
of advanced lymphomas, 659
in management of advanced Hodgkin's disease, 329

comparison of single and divided daily dosage regimens in, in treatment of pulmonary tuberculosis, 794
modified quadruple, solid tumors treated by, 160
and regularity of treatment after discharge from hospital, 798
of tuberculosis, philosophy and policy of, 795
Chest
film, lateral decubitus, as aid in determining air-trapping in children, 509
radiographs, inspiration-expiration movements measured on, correlated with pulmonary function studies, 665
radiography, vertical fissure line in, 346
service, 15-year study of 350 cases of sarcoidosis on, 320
Children
asthmatic
disodium cromoglycate in, 323
effect of intermittent positive-pressure breathing on airway resistance in, 323
incidence of pollen sensitivities on skin test and bronchial challenge in, in Perth, Western Australia, 325
with bronchial asthma and recurrent pneumonia, lung function in, 322
changing role of surgery in treatment of pulmonary tuberculosis in, 353
lateral decubitus film as aid in determining air-trapping in, 509
normal azygos vein width in, 812
quantitative measurements of lung function in, by means of Compton backscatter, 507
normal mediastinal mass in, 170
school, influence of obvious anonymity on response of, to questionnaire about smoking, 499
in West Bengal, respiratory syncytial virus infection in, 176
Choriocarcinoma. *See* Tumors
Chromium oxide, iron oxide, and nickel oxide fumes, chronic exposure to, of metal dressers in steelworks, 654
Chromosome, 16, 502
Cigarettes. *See* Smoking
Circulation
abnormal, at high altitude in subject with previous history of high-altitude pulmonary edema, 339
collateral, in superior vena caval obstruction following ventriculoatrial shunt catheterization in hydrocephalus, 508
Circulatory
insufficiency, necrosis of tumor cells related to, in pulmonary tumor embolism, 160
and respiratory effects of phenyldiguanide and lobeline, 508
and ventilatory adjustments after transplantation of lung, 351
Cirrhosis, liver, mechanism and hypoxemia and hypocapnia in, 667
Coal workers
in different coalfields in Great Britain, lung dust and lung iron contents of, 655
ex-, chronic bronchitis in, working in steel industry, 324
lung mechanics and frequency dependence of compliance in, 498
lungs of, relation between content and composition of, and radiological appearances, 325
with pneumoconiosis, simple, relationship of pulmonary impairment in, to type of radiographic opacity, 326
Coarctations, pulmonary artery, observations on natural history of, 341
Coccidioidomycosis. *See* Mycoses
Coin lesion in focalized pulmonary histoplasmosis, 669
Collagen plaques, pure, on diaphragm and pleura, 660
Collagenase, elastase, and papain, effects of, on structure and function of rat lungs *in vitro*, 326
Compliance, frequency dependence of, and lung mechanics in coal miners, 498
Compton backscatter, quantitative measurements of lung function in children by means of, 507
Contraceptives, oral
pulmonary capillary blood volume in women taking, 342
use of, by patients with thromboembolism following surgery, trauma, or infection, 799
Cord factor. *See* Trehalose-6,6′-dimycolate
Corticosteroids and antibiotics for treatment of fulminance hydrocarbon aspiration, 799
Cromolyn sodium inhibition of aerosol antigen challenge, double blind crossover study of, 800
Cryptococcosis
pulmonary, mimicking carcinoma of lung, 660
visceral, without central nervous system or pulmonary involvement, presenting as hepatitis, 333
Cycloheximide, quantitative evaluation of

antifungal properties of, 657
Cyst, bronchogenic, partial defect of pericardium associated with, 168
Cystic
adenomatoid malformation of lung, 344
fibrosis, liver scanning and liver function in, 502
Cytology
diagnosis of thoracic tumors by, 159
sputum, diagnosis of primary lung cancer by, 160
Densitometry patterns, regional, radiological appearances and pulmonary function tests, correlation of, in chronic bronchitis and emphysema, 167
Detroit receiving hospital, occurrence and mortality of gram-negative bacillary pneumonias at, 164
Dextrocardia, left aortic arch, and tracheal compression in unusual type of vascular ring, 508
D-glucuronic acid, binding with PPD-S, 806
Dialysis method, double, of producing farmer's lung antigens, 499
Diaphragm, pure collagen plaques on, 660
Diffusion, vertical, study by, of isoniazid inactivation in tuberculous patients, 808
Digitalization, elegant, for congestive heart failure, 337
Digitoxin, interactions between, and other drugs in man, 338
Dilution methods, tube, study by, of isoniazid inactivation in tuberculous patients, 808
Diphenylhydantoin, effect of, on ventilation tests in airway obstruction, 808
Disodium cromoglycate
bronchial obstructive reactions to inhalation of house dust and protective effects of, 152
in childhood asthma, 323
protective effect of, on rat peritoneal mast cells, 327
Diuretics, use of, in treatment of early wet lung syndrome, 672
Dock workers, mesothelioma of pleura in, 330
Dog (s)
awake, effects of acutely induced changes in arterial pH on pulmonary vascular resistance during normoxia and hypoxia in, 506
beagle, hemodynamic effects of oral aminorex and amphetamine in unanesthetized, 338
bleomycin-induced interstitial pneumonia in, 157
blood gas transfer after small airway obstruction in, 661
factors affecting gas exchange by collateral ventilation in, 665
fluorometric and microbiological assays for rifampin and determination of serum levels in, 503
intracellular buffering in, at varying CO_2 tensions, 666
liver, perfused, effect of hypoxia on succinate metabolism in man and, 506
Doppler ultrasonic device, evaluation of, for diagnosis of venous air embolism, 351
Double blind crossover study of cromolyn sodium inhibition of aerosol antigen challenge, 800
Drainage, pulmonary venous, surgical treatment of, 351
Drugs, analeptic, role of, in therapy of respiratory failure, 654
Dust
deposits, pulmonary, study of, using electron microscope in conjunction with electron sound analyser, 333
house, bronchial obstructive reactions to inhalation of, and protective effects of disodium cromoglycate and prednisolone, 152
mineral, fibrogenic effects of, injected into pleural cavity of mice, 807
Dye, patent blue, allergic reaction to, in lymphangiography, 343
Dysphagia caused by cardiac enlargement, 812
Edema
acute pulmonary
associated with librium abuse, 663
associated with parathion poisoning, 663
high-altitude pulmonary, abnormal circulatory response to high altitude in subjects with previous history of, 339
interstitial pulmonary, 812
in acute malaria, 164
paraquat, in paraquat poisoning, 338
pulmonary, with capillary leak syndrome, 800
Effusion
contralateral pleural, intrapulmonary neurofibroma associated with, 159
interlobar, 168
neoplastic pleural, what can be expected from mannomustine via intrapleural injection in, 654
rheumatoid pleurisy with, 153

subpulmonary pleural, ascites simulating, 170
Elastase, collagenase, and papain, effects of, on structure and function of rat lungs *in vitro*, 326
Elastic loads, added, effects of, on respiratory response to CO_2 in man, 506
Electrocardiogram study of aged pulmonary tuberculosis patients, 673, 674, 816
Elephant, Asian and African, studies of respiratory functions of blood in, 506
Embolectomy, transvenous pulmonary, hemodynamic and respiratory response to, 174
Emboli (sm)
catheter, removal of, and internal jugular pulmonary arteriography, 344
massive pulmonary, bedside diagnosis of, 347
pulmonary
fat, value of arterial hypoxemia in diagnosis of, 334
and Fleischner lines, 344
following spinal anesthesia, 173
implications of urokinase study concerning surgical treatment of, 348
with infarction or hemorrhage, absence of air bronchogram sign as reliable finding in, 172
tumor, necrosis of tumor cells related to circulatory insufficiency in, 160
venous air, evaluation of Doppler ultrasonic device for diagnosis of, 351
Emphysema
correlation of regional densitometry patterns, radiological appearances, and pulmonary function tests in, 167
diagnosing, from lung scan, 172
in excised lungs, central airway resistance in, 810
infantile lobar, with lobar agenesia and congenital heart disease, 331
lobar, nonoperative management of, 349
mediastinal, secondary to fracture of orbital floor, 511
and mitral valve disease, 797
number and dimensions of small airways in, 804
pulmonary
and alpha$_1$-antitrypsin deficiency, 161
necropsy study of, in Glasgow, 332
relation of smoking and age to, 501
Empyema
radiologic assessment of bronchopleural fistula with, 509
tuberculous, 674
End-diastolic pressure, pulmonary arterial, evaluation of, as estimate of left ventricular end-diastolic pressure in patients with normal and abnormal left ventricular performance, 340
Endocrine
cells in bronchial mucosa of human fetuses, 803
manifestation of pulmonary carcinoma in Nigerian, 160
Endometriosis of lung, 803
Endotoxin, *E. coli*, pulmonary effects of, 327
Eosinophilia
pulmonary infiltrates, and asthma due to *Ascaris suum* infestation in man, 504
tropical, 800
Eosinophilic pneumonia, chronic, 153
Epiphrenic diverticula of esophagus and surgical treatment, 348
Erythematosus, systemic lupus, and lupus-like syndrome in prolonged treatment with isoniazid, 319
Erythromycin, resistance of group A beta-hemolytic streptococci to, 659
Escherichia coli endotoxin, pulmonary effects of, 327
Eskimos, Frobisher, and tuberculosis, 799
Esophageal pH measurement, effects of posture in hiatus hernia as studied by, 154
Esophagus, epiphrenic diverticula of, and surgical treatment, 348
Esterase activity, acetyl-naphthylamine, of mycobacteria, 328
Ethambutol
follow-up studies on visual disturbances due to, 653
hyperuricemia due to, 318
long-term effect of, in far advanced pulmonary tuberculosis patients, 318
mode of action of, 318
rifampicin and ethionamide in retreatment of pulmonary tuberculosis, 652
in tuberculous meningitis, 814
Ethers, quinolyl aryl sulfides, and sulfones, antimycobacterial activity of, *in vitro*, 657
Ethionamide
hypothyroidism due to, 795
rifampicin and ethambutol in retreatment of pulmonary tuberculosis, 652
Ewing's tumor, 329
Exercise
effects of cigarette smoking on hemodynamics at rest and during, 337
physiological correlates of perceived exertion in continuous and intermittent,

with same average power output, 341
pulmonary intravascular and extravascular fluid volumes in cardiac patients during, 164
rebreathing methods for measuring mixed venous P_{CO_2} during, 667
sub-maximal, effect of iron-deficiency anaemia on transfer factor for lung and ventilation and cardiac frequency during, 666
tests in patients with chronic disease, 152
Expiratory velocity, maximal, factors influencing, at low lung volume, 811
Fallot, tetralogy of
left pulmonary artery from ascending aorta in, 511
pulmonary vasculature in, 345
Farmer's lung
antigens, double dialysis method of producing, 499
simplified hemagglutination test for, 801
Ferrets, immunity to influenza in, 807
Fetal pulmonary hypertension, experimental model for, 510
Fetuses, endocrine cells in bronchial mucosa of human, 803
Fibrosis and cancer, relation between, of lung of rats treated with N-methyl-N-nitrosourethane, 661
Fissure line, vertical, in chest radiograph, 346
Fistula, bronchopleural, with empyema, radiologic assessment of, 509
Fleischner lines and pulmonary emboli, 344
Flow
some aspects of physics of, in central airways, 667
-volume curves, maximal expiratory, simple physical models in interpreting, 667
Flucloxacillin, new semisynthetic isoxazolyl penicillin, 795
Fluid volumes, pulmonary intravascular and extravascular, in exercising cardiac patients, 164
5-Fluorouracil, enchantment of tumor growth and immunosuppression in mice with, 807
Foregut malformation, congenital bronchopulmonary, 170
Freeze-etching and steroscan electron microscopic studies, 336
Frequency-dependence, distribution of ventilation and, of dynamic lung compliance, 167
Fungi
aspergillosis, allergic, 796
Aspergillus
flavus as cause of pulmonary aspergillosis, 321
fumigatus, effect of gentamicin on growth of, 801
infection complicating cardiac transplantation, 175
and other, association of asthma with, 319
bronchopulmonary occurrence of, in adults, 805
cultural and morphologic findings in cervical and mediastinal lymph nodes at necropsy, with reference to, 805
Phoma violacea, precipitins against, isolated from mouldy shower curtain in allergic interstitial pneumonitis, 799
systemic, new stain for, in tissue, 804
Fungus ball, unusual manifestation of coccidioidomycosis, 344
Gangrene, pulmonary lobar, complicating lobectomy, 349
Gas
exchange
by collateral ventilation, factors affecting, in dog, 665
and pulmonary ventilation in bronchiectasis, 167
trapped in lungs, measurement of, at function residual capacity and effects of posture, 164
Gentamicin
and carbenicillin, *in vitro* combined activity of, on *P. aeruginosa*, 152
concentrations in blood, inhibitory effect of heparin on, 662
effect of, on growth of yeasts, yeast-like organisms, and *Aspergillus fumigatus*, 801
endotracheal, in bronchial infections in patients with tracheostomy, 318
Glasgow, necropsy study of pulmonary emphysema in, 332
Glomerulus and serum sickness in experimental hypoxia, 806
Gold miners, African, cancer pattern in, 157
Goodpasture syndrome, 161, 332
remission in, and treatment by immunosuppression, 155
Granulomatosis, Wegener's, roentgenographic observations during treatment of, 168
Graphite pneumoconiosis, 655

Great Britain
lung dust and lung iron contents of coal workers in different coalfields in, 655
review of three patients with histoplasmosis in, 321
Greece
County Epirus, specific and nonspecific tuberculin sensitivity in, 353
spirometric values for normal adult males in, 342
Guinea pigs
acute experimental hypersensitivity pneumonitis in, 806
cell respiration of, inoculated with white blood cells of pulmonary sarcoidosis patients, 162
Gumma, pulmonary, 671
Gynecomastia and hypertrophic pulmonary osteoarthropathy syndrome in bronchial carcinoma, 500
Halothane, absence of effect of, on blood hemoglobin O_2 equilibrium *in vitro*, 163
Hamartochondroma. *See* Tumors
Heart
cardiac
arrest in critically ill, 161
catheterization, radiation exposure to personnel during, 172
enlargement, dysphagia caused by, 812
frequency, effect of iron-deficiency anaemia on, during sub-maximal exercise, 666
patients, pulmonary intravascular and extravascular fluid volumes in exercising, 164
resuscitation, anoxic brain damage after, 173
surgery, role of respirator in management of patients after, 350
transplantation, *Aspergillus* infection complicating, 175
disease, congenital, with lobar agenesia, in infantile lobar emphysema, 331
failure, congestive, elegant digitalization for, 337
syndrome, hypoplastic left, microangiography of pulmonary arterial system in, 344
volume characteristics, left, with right ventricular volume overload, 332
Hemagglutination
inhibition antibodies, influenza, in Northern India, 499
test, simplified, for farmer's lung, 801
Hemodynamic (s)
cigarette smoking, effects of, on, at rest and during exercise, 337
effects of oral aminorex and amphetamine in unanesthetized beagle dogs, 338
pulmonary and systemic, effects of aminorex and amphetamine on, in calf, 337
and respiratory responses to transvenous pulmonary embolectomy, 174
Hemoptysis, diagnostic and therapeutic contribution of selective bronchial angiography in course of, 669
Hemorrhage, absence of air bronchogram sign as reliable finding in pulmonary embolism with, 172
Heparin, inhibitory effect of, on gentamicin concentrations in blood, 662
Hepatitis, visceral crytococcosis without central nervous system or pulmonary involvement presenting as, 333
Hernia
hiatal, long-term results of Mark IV operation for, 348
hiatus, effects of posture in, 154
small Morgagni, sign of the cane, new radiological sign for diagnosis of, 169
$HgCl_2$-glutathione, radioactive, pulmonary scintigraphy using, in lung cancer, 345
Hilar and mediastinal masses, rotational tomography of, 671
Histoplasma capsulatum, defense against, in hypogammaglobulinemia, 153
Histoplasmosis. *See* Mycoses
Hoarseness, postoperative, 511
Hodgkin's disease
advanced, combination chemotherapy (MOPP) in management of, 329
analysis of HL-A antigens in patients with, 502
diagnosis of, by bronchial biopsy, 501
paparotomy and splenectomy in staging of untreated patients with, 509
use of ^{67}Ga scanning in staging of, 813
use of thin lung shields to deliver limited whole-lung irradiation during mantle-field treatment of, 173
Hospital
employees, general, serial tuberculin testing and isoniazid therapy in, 176
general, adult pneumonia in, 663
Humidifier, new, 323
Hyaline pleural plaques, pathological anatomy of, 161
Hyaluronic acid
determination, contribution of, in diag-

nosis of pleural mesothelioma, 660
histochemical demonstration of, in pleural malignant mesotheliomas, 660
Hydrocephalus, collateral circulation in superior vena caval obstruction following ventriculoatrial shunt catheterization in, 508
Hydroxyproline excretion, urinary, in carcinoma of breast, 806
Hypercapnia
and hypoxia as respiratory stimulants and depressants, 166
severe chronic, tolerance and survival in, 508
Hyperlactatemia, hyperventilation induced, reversal of, by acetazolamide, 163
Hypersensitivity
evaluation of tests for, in allergic bronchopulmonary aspergillosis, 153
pneumonitis, acute experimental, in guinea pig, 806
Hypertension
fetal pulmonary, experimental model for, 510
primary pulmonary, 322
Hyperthermia, selective inhibitory effect of, on metabolism and growth of malignant cells, 503
Hyperuricemia due to ethambutol, 318
Hyperventilation
induced hyperlactatemia, reversal of, by acetazolamide, 163
response of brain surface pressure to, 339
voluntary, arterial carbon dioxide changes during, in chronic obstructive pulmonary disease, 810
Hypocapnia and hypoxemia in liver cirrhosis, mechanism of, 667
Hypogammaglobinemia, defense against *Histoplasma capsulatum* in, 153
Hypothyroidism due to ethionamide, 795
Hypoventilation, chronic, due to diminished sensitivity of respiratory centre associated with Parkinsonism, 340
Hypoxemia
and hypocapnia in liver cirrhosis, mechanism of, 667
postoperative, contribution of age to maldistribution of ventilation in, 341
value of arterial, in diagnosis of pulmonary fat embolism, 334
Hypoxia
after massive extrathoracic trauma, 511
effect of, on succinate metabolism in man and isolated perfused dog liver, 506
effects of acutely induced changes in arterial pH on pulmonary vascular resistance during, in awake dogs, 506
experimental, glomerulus and serum sickness in, 806
and hypercapnia as respiratory stimulants and depressants, 166
hypercapnic, response of brain surface pressure to, 339
Ilmenite extracting plant workers, health of, 325
Immunization, influence of adjuvants on, in influenza in ferrets, 807
Immunofluorescent and immunologic studies of rheumatoid lung, 332
Immunoglobulin levels in infantile pneumocystosis, 502
Immunosuppression
and enchantment of tumor growth in mice with 5-fluorouracil, 807
Goodpasture syndrome treated by, 155
India
Delhi
chronic obstructive lung disease in, 796
studies in yet unknown allergenic pollens of, 156
Northern
influenza hemagglutination inhibition antibodies in, 499
mycoplasma species prevalent in respiratory illness in community in, 499
South, skin sensitivity to six mycobacterial antigens in group of families in, 352
Western, distribution of cancer in endogamous groups in, 498
Indians, Southwestern American, roentgen manifestations of diseases in, 510
Infants
benign intrathoracic lipoma with rib erosion in, 801
and children, device for bronchography in, 170
intrathoracic mesenchyoma observations in two, 802
physiologic pressure differences between main and branch pulmonary arteries in, 341
radiological patterns of congenital absence of pulmonary valve in, 510
Infarction
absence of air bronchogram sign as reliable finding in pulmonary embolism with, 172
acute myocardial, blood-gas changes and pulmonary hemodynamics following, 505

Infection (s)
bacterial, effect of interferon inducers and interferon on, 661
bronchial, endotracheal gentamicin in, in patients with tracheostomy, 318
cytomegalovirus, pneumonia as clinical manifestation of, in previously healthy adults, 800
deep entomophthora phycomycotic, reported for first time in U.S., 664
and disease in group of South Indian families, 352
influenza A, rimantadine therapy of, in mice, 658
lower respiratory tract, transtracheal aspiration in diagnosis of, 806
oral contraceptive use in patients with thromboembolism following, 799
respiratory syncytial virus, in children in West Bengal, 176
Influenza
A infection, rimantadine therapy of, in mice, 658
hemagglutination inhibition antibodies in Northern India, 499
hemophilus, and acute sinusitis, 816
immunity to, in ferrets, 807
Inhalation
aerosol, electrical sequelae of, 661
bronchial obstructive reactions to, of house dust and protective effects of disodium cromoglycate and prednisolone, 152
relative, effects of unilateral pulmonary artery occlusion on, 326
Inspiration, single forced, effects of, on airway conductance, 668
Inspiratory safety valve, simple, 350
Interferon
inducers and interferon, effect of, on bacterial infections, 661
induction and viral protection, lack of correlation between, with tilorone hydrochloride, 658
Intubation
celestin tube, radiologic aspects of, for incurable obstructive esophageal carcinoma, 500
fluoroscopic tracheal, for bronchography, 171
Ireland, Republic of, smoking habits of medical profession in, 504
Iron oxide, chromium oxide, and nickel oxide fumes, chronic exposure to, of metal dressers in steelworks, 654
Irradiation, limited whole-lung, use of thin lung shields to deliver, during mantlefield treatment of Hodgkin's disease, 173
Irrigation, constant-pressure, for arterial catheters, 348
Isoniazid
adverse effects of, 795
high dose, evaluation of, twice weekly regimen in primary treatment of moderately advanced pulmonary tuberculosis, 794
inactivation
of, by condensation in syrup preparation, 163
rate in tuberculosis, use of sulphadimidine acetylation test in determining, 808
in tuberculous patients, 808
prolonged treatment with, systemic lupus erythematosis and lupus-like syndrome as complication of, 319
therapy and serial tuberculin testing in general hospital employees, 176
Isoproterenol
endogenous regulation of pulmonary response to, 340
-phenylephrine aerosol, effect of, on blood gases, ventilation, and perfusion in chronic bronchitis with asthma, 323
and saline, nebulization of, in chronic bronchitis, 797
sensitivity test, standardized, 808
Jaundice and rifampicin-allergic reaction, side effects of, 653
Johannesburg, cancer pattern in Africans at Baragwanath Hospital in, 163
Jugular vein puncture, internal, with margin of safety, 814
Kanamycin-ethionamide-cycloserine . and streptomycin-isoniazid-PAS, evaluation of alternative regimens of, 794
Korea, virulence of tubercle bacilli isolated in, during 1968-69, 354
Kveim reaction, 335
Lactate
extraction and myocardial oxygen, patterns of, in patients undergoing cardiopulmonary bypass, 349
-pyruvate ratio, cerbrospinal fluid, in normal and asphyxiated neonates, 335
Laparotomy and splenectomy in staging of untreated patients with Hodgkin's disease, 509
Laryngoscopy combined with roentgenology as diagnostic technique for laryngotracheoesophageal cleft, 670

Laryngotracheoesophageal cleft, laryngoscopic and roentgenographic diagnostic technique for, 670
Larynx, radiation tolerance of normal tissues of, 510
Lecithin, dipalmitoyl, action of paraquat on incorporation of palmitic acid into, in mouse lungs, 799
Leptospirosis, pulmonary changes in, 164
Lesions
  benign and malignant peripheral lung, transbronchial biopsy of, 175
  histologic, of tuberculous pleurisy, 815
  post-tracheotomy radiological evaluation of, 174
Leukocytes
  peripheral, mucopolysaccharides in, of cancer patients, 162
  polymorphonuclear, and mycoplasma, interaction *in vitro* between, 162
  role of, on pulmonary effects of *E. coli* endotoxin, 327
Librium abuse associated with acute pulmonary edema, 663
Lincomycin, resistance of group A beta-hemolytic streptococci to, 659
Lipoma. *See* Tumors
Liver
  perfused dog, effect of hypoxia on succinate metabolism in man and, 506
  scanning and liver function in cystic fibrosis, 502
Lividomycin
  experimental study on antituberculous activity of, 653
  resistance pattern of tubercle bacilli to, 658
Lobectomy, pulmonary lobar gangrene complicating, 349
Lobeline and phenyldiguanide, respiratory and circulatory effects of, 508
Lung (s)
  aged, 332
  area, masked tumors in, 159
  artificial, buying time with, 347
  asynchronous bilateral lipoid pneumonia presenting as solitary lipoid nodules in, 346
  bacterial clearance, effect of antimicrobial therapy on, in burned rat, 336
  bird fancier's, radiological appearances of allergic alveolitis due to, 670
  cancer
    diagnostic evaluation of ^{67}Ga scanning of, 169
    induced by inhaled radon in rats, 661
    metastatic, radiographic findings of, 345
    mortality of newspaper workers from, 327
    primary
      diagnosis of, by sputum cytology, 160
      395 cases of, 329
    problems associated with mass examination of, 669
    pulmonary scintigraphy using radioactive $HgCl_2$-glutathione in, 345
    risk in older men, 330
    in U.S. since 1955, 327
  carcinoma of, pulmonary cryptococcosis mimicking, 660
  chemodectoma of, 802
  chemoreflexes in man, search for evidence of, 508
  coalworkers', relation between content and composition of, and radiological appearances, 325
  compliance, dynamic, distribution of ventilation and frequency-dependence of, 167
  cystic adenomatoid malformation of, 344
  diffusing capacity, effect of iron-deficiency anaemia on, during sub-maximal exercise, 666
  disease
    chronic, mycolytic agent bromhexine in, 323
    chronic obstructive
      comparison of pressure and volume cycled respirator in, 498
      in Delhi, 796
      nonspecific, blood volume studies in, 339
      patterns of cardiovascular dysfunction in, 497
  diseases, interstitial, respiratory function in, 322
  double primary carcinomas of, 329
  dust and lung iron contents of coal workers in different coalfields in Great Britain, 655
  endometriosis of, 803
  excised emphysematous, central airway resistance in, 810
  familial Mediterranean fever with involvement of, 321
  farmer's, antigens, double dialysis method of producing, 499
  frictional forces at surface of, 665
  function
    changes, study of, among different grades of byssinosis, 656
    in children with bronchial asthma and

recurrent pneumonia, 322
quantitative measurements of, in children by means of Compton backscatter, 507
inflammation, role of pulmonary vagal afferent nerve fibres in development of rapid shallow breathing in, 503
lesions, benign and malignant peripheral, transbronchial biopsy of, 175
lymphangitic spread of metastatic cancer to, 169
measurement of gas trapped in, at function residual capacity and effects of posture, 164
mechanics and frequency dependence of compliance in coal miners, 498
of mice, action of paraquat on incorporation of palmitic acid into dipalmitoyl lecithin, 799
occurrence of psammona bodies in papillary adenocarcinoma of, 804
percutaneous trephine biopsy of, 328
primary carcinoma of, 802
rat
effects of elastase, collagenase, and papain on structure and function of, *in vitro*, 326
relation between fibrosis and cancer of, treated with N-methyl-N-nitrosourethane, 661
resected, changing anatomical aspects of pulmonary tuberculosis in, 803
rheumatoid, immunofluorescent and immunologic studies of, 332
scan
diagnosing emphysema from, 172
utilization in diagnosis of pulmonary disease, 812
shields, thin, use of, to deliver limited whole-lung irradiation during mantle-field treatment of Hodgkin's disease, 173
shock-, syndrome, 349
syndrome, early wet, use of diuretics in treatment of, 672
transplantation
human, alveolar manifestations of rejection in, 346
ventilatory and circulatory adjustments after, 351
tumors, pathological factors in survival of, 500
volume
and airway closure during breathing with maintained airway positive pressures, 810
low, factors influencing maximal expiratory velocity at, 811
water and alveolar and capillary volumes after intracardiac surgery, 672
wet, diagnostic considerations of, 333
Lupus-like syndrome and systemic lupus erythematosus in prolonged treatment with isoniazid, 319
Lymph glands, silicon content determination in, by scintigraphy, 169
Lymph node (s)
calcified and caseated tuberculous, lymphangiogram of, 168
cervical and mediastinal, cultural and morphologic findings in, at necropsy, with reference to fungi, 805
normal, comparative histological changes in, following ethiodol lymphography, and colloidal gold-198 lymphscanning, 326
Lymphadenitis, preauricular and cervical, due to *M. intracellulare*, 352
Lymphangiography. *See* Roentgenology
Lymphatics, intrapulmonary and pleural, during lymphangiography, 171
Lymphocytotoxicity of serum in sarcoidosis, 335
Lymphography. *See* Roentgenology
Lymphoma. *See* Tumors
Malaria, acute, interstitial pulmonary edema in, 164
Malaysian aboriginals, respiratory function among, 164
Mannomustine via intrapleural injection in neoplastic pleural effusion, what can be expected from, 654
Mantle-field treatment of Hodgkin's disease, use of thin lung shields to deliver limited whole-lung irradiation during, 173
Mark IV operation, long-term results of, for hiatal hernia, 348
Mast cells, peritoneal, protective effect of disodium cromoglycate on rat, 327
Mediastinal mass, normal, in late childhood, 170
Mediastinoscopy, bilateral tension pneumothorax associated with, 347
Mediastinum
anterior, primary seminoma of, 803
involved with anaplastic carcinoma, 659
left superior, patterns of pleural reflections of, 509
Medicare, cost-benefit analysis of, 809
Mediterranean fever, familial, with involvement of lungs, 321

Meningitis, tuberculous, ethambutol in, 814
Menocil. *See* Aminorex
Menstrual cycle, tracheobronchial cytologic changes during, 162
Mesenchymoma. *See* Tumors
Mesothelioma. *See* Tumors
Metal dressers, chronic exposure to iron oxide, chromium oxide, and nickel oxide fumes of, 654
Metastases, subepithelial endobronchial, 171
Methotrexate
  therapy, pulmonary changes associated with, 664
  variability of individual tolerance to, in cancer patients, 155
Mice
  enchantment of tumor growth and immunosuppression in, with 5-fluorouracil, 807
  fibrogenic effects of mineral dusts injected into pleural cavity of, 807
  lungs of, action of paraquat on incorporation of palmitic acid into dipalmitoyl lecithin in, 799
  rimantadine therapy of influenza A infection in, 658
Microangiography. *See* Roentgenology
Microlithiasis, pulmonary alveolar, 172
Microscope
  electron
    characteristics of inhaled chrysotile asbestos fibre, 655
    study of pulmonary dust deposits using, in conjunction with electron sound analyser, 333
  steroscan electron, studies with, and freeze-etching, 336
Microscopy, immune electron, of not cell-bound antigen of *Mycoplasma pneumonae*, 158
Minipig, blood gas transfer after small airway obstruction in, 661
Mitral valve disease and emphysema, 797
Morgagni hernias, small, sign of the cane, new radiological sign for diagnosis of, 169
Mucopolysaccharides in peripheral leucocytes of cancer patients, 162
Mucormycosis. *See* Mycoses
Mucosa, bronchial, endocrine cell in, of human fetuses, 803
Muscle paralysis, general anesthesia, and mechanical ventilation, effects of, on pulmonary nitrogen clearance, 174
Muscular distrophy, progressive, pulmonary function in, 342
Myasthenia gravis
  nonthymic malignancy in, 500
  surgical management in, 350
Mycobacteria, acetyl-naphthylamine esterase activity of, 328
Mycobacterial antigens, six, skin sensitivity to, in group of South Indian families, 352
Mycobacteriosis, atypical, clinical study of, 673
Mycobacterium
  africanum, tuberculosis due to, in Black Africans in Paris, 353
  asiaticum, a new facultative pathogenic mycobacterium species, 158
  chelonei, pulmonary disease caused by, 815
  intracellulare, preauricular and cervical lymphadenitis due to, 352
  rhodochrous, taxonomic study on, 801
  simiae, new facultative pathogenic mycobacterium species, 158
Mycoplasma
  and polymorphonuclear leukocytes, interaction *in vitro* between, 162
  species prevalent in respiratory illness in community in Northern India, 499
Mycoplasma pneumoniae
  complement-fixing and immunofluorescent antibodies to, in sera from normal community, 158
  immune electron microscopy of not cell-bound antigen of, 158
Mycoses
  aspergillosis
    allergic bronchopulmonary, 153
    pulmonary
      caused by *Aspergillus flavus*, 321
      diagnosis of, by bronchial brushing technique, 336
      versus carcinoma, 803
  coccidioidomycosis
    fungus ball as unusual manifestation of, 344
    primary cutaneous, 806
    visceral, without central nervous system or pulmonary involvement, 333
  histoplasmosis
    Earth Day, 156
    focalized pulmonary, 669
    review of three patients with, in Great Britain, 321
  mucormycosis, pulmonary, 319
Myxoma. *See* Tumors
Nebulization
  of saline and isoproterenol in chronic

bronchitis, 797
ultrasonic, effects of, on pulmonary mechanics and blood gases in obstructive pulmonary disease, 654
Necrosis of tumor cells related to circulatory insufficiency in pulmonary tumor embolism, 160
Neonate (s)
delayed resorption of pulmonary alveolar fluid in, 669
normal and asphyxiated, cerebrospinal fluid lactate/pyruvate ratio in, 335
Neoplasma, primary pulmonary, angiography of bronchial artery in, 668
Neoplasms. *See* Tumors
Nerve fibres, pulmonary vagal afferent, role of, in development of rapid shallow breathing in lung inflammation, 503
Neurofibroma. *See* Tumors
Newspaper workers, mortality of, from lung cancer and bronchitis, 327
Nickel oxide, iron oxide, and chromium oxide fumes, chronic exposure to, of metal dressers in steelworks, 654
Nigerian, endocrine manifestation of pulmonary carcinoma in, 160
Nitrogen clearance, pulmonary, effects of general anesthesia, muscle paralysis, and mechanical ventilation on, 174
Nitrous oxide, effect of, on alveolar carbon dioxide tension, 174
N-methyl-N-nitrosourethane, relation between fibrosis and cancer of lung of rats treated with, 661
Nocardia asteroides, in vitro studies of combined effect of ampicillin and sulfonamides on, 657
Nodules, solitary, asynchronous bilateral lipoid pneumonia presenting as, in lung, 346
Normoxia, effects of acutely induced changes in arterial pH on pulmonary vascular resistance during, in awake dogs, 506
Occlusion, unilateral pulmonary artery, effects of, on relative inhalation and perfusion, 326
Oncogenesis
immunologic disturbance in, 501
and thymus, relationship between, 500
Orbital floor, mediastinal emphysema secondary to fracture of, 511
Oscillatory flow in human airways, prediction of distribution of, 666
Osmosis, gas-induced, clinical implications of, 339
Osteoarthropathy syndrome, hypertrophic pulmonary, and gynecomastia in bronchial carcinoma, 500
Osteomyelitis, BCG, roentgenologic aspects of, 175
Oxacillin-resistant staphylococci, antibiotic susceptibility of, 652
Oxygen
alveolopathy in adults, 664
and carbon monoxide pulmonary diffusing capacity estimates, inhomogeneity effects on, by steady-state methods, 165
equilibrium, blood hemoglobin, absence of effect of halothane on, *in vitro*, 163
factor, application of, to clinical radiotherapy, 173
gross pulmonary arterio-venous shunts in acute respiratory failure requiring prolonged administration of, 667
myocardial, and lactate extraction, patterns of, in patients undergoing cardiopulmonary bypass, 349
saturation, central venous, in shock, 510
transport mechanism in residents at high altitude, 166
-transporting system in relation to age, 507
Oxygenation
prepulmonary, by peripheral cannulation for respiratory distress, 174
prolonged extracorporeal, for acute posttraumatic respiratory failure, 349
Palmitic acid, action of paraquat on incorporation of, into dipalmitoyl lecithin in mouse lungs, 799
Papain, elastase, and collagenase, effects of, on structure and function of rat lungs *in vitro*, 326
Paraquat
action of, on incorporation of palmitic acid into dipalmitoyl lecithin in mouse lungs, 799
poisoning
paraquat edema in, 338
pulmonary changes in, 664
ultrastructure of alveolar wall in, 503
Parathion poisoning associated with acute pulmonary edema, 663
Parathyroid function in sarcoidosis, 321
Paris, tuberculosis due to *M. africanum* in Black Africans in, 353
Parkinson's disease, chronic hypoventilation due to diminished sensitivity of respiratory centre associated with, 340
Penicillin half-life, effect of some drugs on, in blood, 808
Pentobarbital, interaction of, with caffeine as nighttime hypnotic, 337

Perfusion
effect on, of isoproterenol-phenylephrine and salbutamol aerosols in chronic bronchitis with asthma, 323
effects of unilateral pulmonary artery occlusion on, 326
and ventilation aspects, correlation of, of chronic obstructive pulmonary disease, 796
Pericardium, partial defect of, associated with bronchogenic cysts, 168
Phenyldiguanide and lobeline, respiratory and circulatory effects of, 508
Philadelphia pulmonary neoplasm research project, 330
Phlebography. *See* Roentgenology
Phoma violacea. *See* Fungi
Plasma concentration plateaus, rapidly achieved, with observations on theophylline kinetics, 504
Plasmocytoma. *See* Tumors
Platelets, role of, on pulmonary effects of *E. coli* endotoxin, 327
Pleura
mesothelioma of, in dock workers, 330
pure collagen plaques on, 660
Pleural
biopsy, new reliable instrument for, 511
cavity of mice, fibrogenic effects of mineral dusts injected into, 807
effusion
contralateral, intrapulmonary neurofibroma associated with, 159
subpulmonary, ascites simulating, 170
and intrapulmonary lymphatics during lymphangiography, 171
plaques
hyaline, pathological anatomy of, 161
mortality study of shipyard workers with, 656
reflections
azygos vein and its, 168
patterns of, of left superior mediastinum, 509
Pleurisy, rheumatoid, with effusion, 153
Pneumoconiosis
graphite, 655
simple coal workers', relationship of pulmonary impairment in, to type of radiographic opacity, 326
Pneumocystis carinii
pneumonia
problems in diagnosis and therapy in, 504
radiographic findings in, 669
rapid staining technique for, 500
Pneumocystosis, infantile, immunoglobulin levels in, 502
Pneumolithiasis, endalveolar, 331
Pneumonia
adult, in general hospital, 663
asynchronous bilateral lipoid, presenting as solitary nodules in lung, 346
bleomycin-induced interstitial, in dogs, 157
as clinical manifestation of cytomegalovirus infection in previously healthy adults, 800
chronic eosinophilic, 153
gram-negative bacillary, occurrence and mortality of, at Detroit receiving hospital, 164
Pneumocystis carinii
problems in diagnosis and therapy in, 504
radiographic findings in, 669
recurrent, lung function in children with bronchial asthma and, 322
Pneumonitis
acute experimental hypersensitivity, in guinea pig, 806
allergic interstitial, precipitins against *Phoma violacea*, isolated from mouldy shower curtain in sera from patients with suspected, 799
bleomycin, 809
-fibrosis, classic interstitial, 497
Pneumothorax
bilateral tension, associated with mediastinoscopy, 347
catamenial, 663
spontaneous, problems with, 173
Poland's syndrome, 170
Polish migrants to Australia, cancer mortality in 1962-66 among, 498
Pollen (s)
allergenic, studies in yet unknown, in Delhi, India, 156
sensitivities on skin test and bronchial challenge in asthmatic children in Perth, Western Australia, 325
Pollution, new type of urban, called Earth Day histoplasmosis, 156
Posture
effects of
in hiatus hernia as studied by esophageal pH measurement, 154
measurement of gas trapped in lungs at function residual capacity and, 164
PPD solution, decrease of potency of, using ^{3}H-PPD, 352
PPD-S, binding with D-glucuronic acid, 806
Precipitins against fungus, *Phoma violacea*,

isolated from mouldy shower curtain in sera from patients with suspected allergic interstitial pneumonitis, 799
Prednisolone, bronchial obstructive reactions to inhalation of house dust and protective effects of, 152
Promethazine HCl, accidental intra-arterial injection of, during general anesthesia, 173
Propranolol
effects of, on standardized isoproterenol sensitivity test, 808
test for provoking asthma, 663
Protamine as anticoagulant, 154
Psammona bodies, occurrence of, in papillary adenocarcinoma of lung, 804
Pseudomonas aeruginosa, in vitro combined activity of carbenicillin and gentamicin on, 152
Pseudosarcoma. *See* Tumors
Psychology of physical illness as portrayed in Thomas Mann's *The Magic Mountain,* 152
Pulmonary
arterial pressures, relationship of, to pulmonary venous wedge, 165
changes
associated with methotrexate therapy, 664
in paraquat poisoning, 664
circulation, computer scan of, 168
complications, postoperative, influence of postanesthetic suggestion on prevention of, 511
diffusing capacity estimates, O_2 and CO, inhomogeneity effects on, by steady-state methods, 165
disease
caused by *M. chelonei,* 815
chronic obstructive
arterial carbon dioxide changes during voluntary hyperventilation in, 810
correlation of ventilation and perfusion aspects of, 796
lung scan utilization in diagnosis of, 812
obstructive, effects of ultrasonic nebulization on pulmonary mechanics and blood gases in, 654
function
derangements in bagassosis, 157
following traumatic rupture of bronchus, 672
in progressive muscular dystrophy, 342
studies correlated with movements measured on inspiration-expiration chest radiographs, 665
tests, regional densitometry patterns, and radiological appearances, correlation of, in chronic bronchitis and emphysema, 167
variables in evaluating asbestosis and chronic obstructive airway disease in asbestos workers, 156
hemodynamics and blood-gas changes following acute myocardial infarction, 505
impairment, relationship of, in simple coal workers' pneumoconiosis to type of radiographic opacity, 326
infiltrates, asthma and eosinophilia due to *Ascaris suum* infestation in man, 502
malignancy, recurrent, and Sjörgen's syndrome, 331
manifestations
of Weil's disease, 338
of yellow nail syndrome, 797
mechanics and blood gases, effects of ultrasonic nebulization on, in obstructive pulmonary disease, 654
response, endogenous regulation of, to isoproterenol, 340
thromboembolic disease, 671
valve in infants, radiological patterns of congenital absence of, 510
vascular resistance, effects of acutely induced changes in arterial pH on, during normoxia and hypoxia in awake dogs, 506
venous return, total anomalous, management of, 814
Pulsus paradoxus in respiratory disease, 797
Quinolyl aryl sulfides, sulfones, and ethers, antimycobacterial activity of, *in vitro,* 657
Radiation
exposure to personnel during cardiac catheterization, 172
therapy, fractionated, cell population kinetic model for, 172
tolerance of normal tissues of larynx, 510
Radiography. *See* Roentgenology
Radioiodine, metastases from anaplastic thyroid carcinoma responding to, 346
Radiology. *See* Roentgenology
Radiotherapy
clinical, application of oxygen factor to, 173
results of, in non-Hodgkin's lymphomas, 672

Radon, inhaled, lung cancer induced by, in rats, 661
Ragweed pollen, morphological changes on incubation with saliva from ragweed-allergic and non-allergic humans and, 658
Rat (s)
burned, effect of antimicrobial therapy on lung bacterial clearance in, 336
lung cancer induced by inhaled radon in, 661
lungs
relation between fibrosis and cancer of, treated with N-methyl-N-nitrosourethane, 661
structure and function of, effects of elastase, collagenase, and papain on, *in vitro*, 326
peritoneal mast cells, protective effect of disodium cromoglycate on, 327
Rehabilitation, physical, effect levels and improvement in, 155
Resection
pulmonary, and volume of blood loss, 349
segmental, management of bronchial carcinoma by, 347
Respiration
cell, of guinea pigs inoculated with white blood cells of pulmonary sarcoidosis patients, 162
importance of bronchial tone in, 165
radiofrequency electrophrenic, total ventilatory support in quadriplegic patient with, 343
in vertebrates, comparative physiology of, 664
Respirator
pressure and volume cycled, comparison of, in chronic obstructive lung disease, 498
role of, in management of patients after cardiac surgery, 350
Respiratory
centre, chronic hypoventilation due to diminished sensitivity of, associated with Parkinsonism, 340
and circulatory effects of phenyldiguanide and lobeline, 508
disease
carzinochrom reaction in, 334
obstructive, oral salbutamol as supplement to inhaled aerosol in, 324
pulsus paradoxus in, 797
distress
prepulmonary oxygenation by peripheral cannulation for, 174
syndrome, risk of, by rapid test for surfactant in amniotic fluid, 499
failure
acute
gross pulmonary arterio-venous shunts in, requiring prolonged administration of oxygen, 667
impact of respiratory intensive care unit on survival of patients with, 798
post-traumatic, prolonged extracorporeal oxygenation for, 349
hypoxic, after massive extrathoracic trauma, 511
role of analeptic drugs in therapy of, 654
function
of blood, 342
among Malaysian aboriginals, 164
of mammalian blood, 505
in sarcoidosis, 322
tests in older people, 508
and hemodynamic responses to transvenous pulmonary embolectomy, 174
illness, mycoplasma species prevalent in, in community in Northern India, 499
insufficiency associated with carbon monoxide poisoning, 799
response to CO_2 in man, effects of added elastic loads on, 506
stimulants and depressants, hypoxia and hypercapnia as, 166
syncytial virus infection in children in West Bengal, 176
system, total, frequency response of, from 3 to 7 cps, 665
tract, lower, transtracheal aspiration in diagnosis of infection of, 806
Resuscitation, cardiac, anoxic brain damage after, 173
Rib erosion with benign intrathoracic lipoma in infant, 801
Rifampicin
-allergic reaction and jaundice, side effects of, 653
comparison of blood levels of, following administration before and after breakfast, 662
effectiveness of, in secondary treatment of pulmonary tuberculosis, 815
ethambutol and ethionamide in retreatment of pulmonary tuberculosis, 652
fluorometric and microbiological assays for, and determination of serum levels in dog, 503
-resistance of tubercle bacilli, critical con-

centration for definition of, 653
-resistant tubercle bacilli, virulence of, to experimental animals, 662
symposium on intermittent treatment with, 496
therapeutic effect of, on skin tuberculosis, 352
Rifampin
systemic side-effects of intermittent antituberculosis therapy with, 653
in treatment of pulmonary tuberculosis, 796
Rimantadine therapy of influenza A infection in mice, 658
Roentgenology
air bronchogram sign, absence of, as reliable finding in pulmonary embolism with infarction or hemorrhage, 172
angiographic characteristics of pulmonary veno-occlusive disease, 509
angiography
of bronchial artery in primary pulmonary neoplasma, 668
bronchial, diagnostic and therapeutic contribution of selective, in course of hemoptysis, 669
pulmonary, percutaneous axillary vein approach to selective, 670
arteriographic findings in various stages of renal tuberculosis, 175
arteriography
bronchial, in aspergilloma, 668
internal jugular pulmonary, and removal of catheter emboli, 344
bronchography
device for, in infants and children, 170
fluoroscopic tracheal intubation for, 171
new method of, 344
cavernogram for diagnosis of amoebic liver abscess, 811
combined with laryngoscopy as diagnostic technique for laryngotracheoesophageal cleft, 670
"egg-shell" sign, 169
lymphangiogram of calcified and caseated tuberculous lymph nodes, 168
lymphangiography
allergic reaction to patent blue dye in, 343
intrapulmonary and pleural lymphatics during, 171
ethiodol and colloidal gold-198 lymphscanning, comparative changes in normal lymph node following, 326
microangiography of pulmonary arterial system in hypoplastic left heart syndrome, 344
phlebography, simplified, in deep venous thrombosis, 345
radiograph (s)
chest, vertical fissure line in, 346
inspiration-expiration chest, movements measured on, correlated with pulmonary function studies, 665
radiographic
characteristics of pulmonary veno-occlusive disease, 509
findings
of metastatic lung cancer, 345
in *Pneumocystics carinii* pneumonia, 669
imaging system, evaluation of, with microfocal spot X-ray tube, 669
opacity, type of, relationship of pulmonary impairment in simple coal workers' pneumoconiosis to, 326
and pathologic features of aortic root aneurysm, 343
radiologic
assessment of bronchopleural fistula with empyema, 509
features in aortic stenosis, 812
radiological
appearances
of deep venous thrombus, 345
regional densitometry patterns, and pulmonary function tests, correlation of, in chronic bronchitis and emphysema, 167
relation between content and composition of coalworkers' lungs and, 325
diagnosis of mediastinal abnormality, 171
evaluation of post-tracheostomy lesions, 174
images, visual search patterns and experience with, 671
patterns of congenital absence of pulmonary valve in infants, 510
radiology
oncologic diagnostic, 170
value of, in critical mitral stenosis, 813
of venous thrombosis, 169
roentgen
anatomy, normal, and azygos vein's pleural reflections, 168
manifestations of diseases in Southwestern American Indians, 510
roentgenographic observations during treatment of Wegener's granulomatosis, 168

roentgenograms, dense, positive prints of, 171
roentgenologic aspects of BCG osteomyelitis, 175
scan
computer, of pulmonary circulation, 168
iso-intensity zone, 168
lung
diagnosing emphysema from, 172
utilization in diagnosis of pulmonary disease, 812
scanning
liver, and liver function in cystic fibrosis, 502
^{67}Ga
evaluation of, of lung cancer and other diseases, 169
in staging of Hodgkin's disease, 318
scintigraphy
pulmonary, using radioactive $HgCl_2$-glutathione in lung cancer, 345
silicon content determination in lymph glands by, 169
sign of cane, new radiological sign for diagnosis of Morgagni hernias, 169
slides, black-and-white, in ninety seconds, 168
tomography
half-arc, of cervical-thoracic junction, 508
rotational, of hilar and mediastinal masses including vascular abnormalities, 671
Rupture
of bronchus, traumatic, pulmonary function following, 672
of cervical trachea, 350
Salbutamol
aerosol, effect of, on blood gases, ventilation, and perfusion in chronic bronchitis with asthma, 323
oral, as supplement to inhaled aerosol in obstructive respiratory disease, 324
Saline and isoproterenol, nebulization of, in chronic bronchitis, 797
Saliva from ragweed-allergic and non-allergic humans, morphological changes on incubation with ragweed pollen, 658
Sarcoidosis
abnormal immune status in, 658
cutaneous, 512
15 year study of 350 cases of, on chest service, 320
generalized, presenting as skin nodule, 815
lymphocytotoxic properties of serum in, 335
parathyroid function in, 321
pulmonary, cell respiration of guinea pigs inoculated with white blood cells of patients with, 162
as rare cause of spinal cord widening, 510
respiratory function in, 322
Whipple's disease simulating, 334
Scan. *See* Roentgenology
Scanning. *See* Roentgenology
Scintigraphy. *See* Roentgenology
Screening
laboratory results, "abnormal," and effect on physician and patient, 328
tests, biochemical, and effect of panel size on medical care, 328
Seminoma. *See* Tumors
Senegal, bacteriological observations from therapeutic trials of pulmonary tuberculosis in, 673
Sepsis, severe nonthoracic, impaired pulmonary surfactant synthesis in starvation and, 503
Septal defect, large atrial, and total anomalous pulmonary venous connection, 332
Septum, intact ventricular, pulmonary valve atresia with, 166
Sera
complement-fixing and immunofluorescent antibodies to *M. pneumoniae* in, from normal community, 158
precipitins against *Phoma violacea* isolated from mouldy shower curtain in, from patients with suspected allergic interstitial pneumonitis, 799
Serum
levels in dog, fluorometric and microbiological assays for rifampicin and determination of, 503
lymphocytotoxic properties of, in sarcoidosis, 335
sickness and glomerulus in experimental hypoxia, 806
Shipyard workers with pleural plaques, mortality study of, 656
Shock, central venous oxygen saturation in, 510
Shunts, gross pulmonary arterio-venous, in acute respiratory failure requiring prolonged administration of oxygen, 667
Sign in recognition of azygos continuation of inferior vena cava, 170
Silicon content determination in lymph glands by scintigraphy, 169
Sinus arrhythmia, effects of, on standardized isoproterenol sensitivity test, 808

Sinusitis, acute, and hemophilus influenza, 816
Sjörgen's syndrome with recurrent pulmonary malignancy, 331
Skin
nodule, generalized sarcoidosis presenting as, 815
sensitivity to six mycobacterial antigens in group of South Indian families, 352
tests
comparative, in County Epirus, Greece, 353
incidence of pollen sensitivities on, and bronchial challenge in asthmatic children in Perth, Western Australia, 325
Smoking
and age, relation of, to emphysema, 501
ammonia retention during, 157
behavior in teenage population, 809
cigarette
and body weight, 156
low yield to pulmonary surfactant in, 336
effects of, on hemodynamics at rest and during exercise, 337
non-nicotine, carboxyhemoglobin caused by, and its effects in angina pectoris, 337
habits of medical profession in Republic of Ireland, 504
influence of obvious anonymity on response of school children to questionnaire about, 499
and pulmonary surfactant, 336
withdrawal research, standard recording and reporting system for, 328
Spinal cord widening, sarcoidosis as rare cause of, 510
Spirometric
values for normal adult males in Greece, 342
volume in patients with bilateral thoracoplasty, 340
Spirometry using motivational techniques, 167
Spenectomy and laparotomy in staging of untreated patients with Hodgkin's disease, 509
Sporotrichosis, cutaneous, recently appearing in Northern Virginia, 805
Sputum
cell dynamics in bacterial exacerbations of chronic bronchial disease, 501
cytology, diagnosis of primary lung cancer by, 160
Staining technique, rapid, for *Pneumocystis carinii*, 500
Staphylococci, oxacillin-resistant, antibiotic susceptibility of, 652
Status asthmaticus, treatment of, 798
Steel industry, chronic bronchitis in ex-coal miners working in, 324
Stenosis
aortic, radiologic features in, 812
critical mitral, value of radiology in, 813
Steroid therapy, long-term, complications of, for asthma, 798
Streptococci, group A beta-hemolytic, resistance of, to lincomycin and erythromycin, 659
Streptokinase treatment of thromboembolic disease, 324
Streptomycin-isoniazid-PAS and kanamycin-ethionamide - cycloserine, evaluation of alternative regimens of, 794
Succinate metabolism in man and isolated perfused dog liver, effect of hypoxia on, 506
Suggestion, postanesthetic, influence of, on prevention of postoperative pulmonary complications, 511
Sulfonamides and ampicillin, *in vitro* studies of combined effect of, on *Nocardia asteroides*, 657
Sulfones, quinolyl aryl sulfides, and ethers, antimycobacterial activity of, *in vitro*, 657
Sulphadimidine acetylation test in determining isoniazid inactivation rate in tuberculosis, 808
Surfactant
pulmonary
low yield of, in cigarette smokers, 336
and smoking, 336
rapid test for, in amniotic fluid, risk of respiratory-distress syndrome by, 499
synthesis, impaired pulmonary, in starvation and severe nonthoracic sepsis, 503
Surgical management in myasthenia gravis, 350
Surgical treatment
of epiphrenic diverticula of esophagus, 348
of partial anomalous pulmonary venous drainage, 351
of pulmonary
embolism, implications of urokinase study concerning, 348
and pleural aspergilloma, 814
tuberculosis in children, changing role of, 353

Surgery
intracardiac, lung water and alveolar and capillary volumes after, 672
Mark IV operation, long-term results of, for hiatal hernia, 348
oral contraceptive use in patients with thromboembolism following, 799
for pleuro-pulmonary tuberculosis, 673
Teryzidone, treatment of chronic pulmonary tuberculosis with, 652
Tetracycline therapy, utility of ascorbic acid in, 497
Tetralogy of Fallot
left pulmonary artery from ascending aorta in, 511
pulmonary vasculature in, 345
Tetraplegic patients, breathing patterns and regional ventilation distribution in, 505
Theophylline
kinetics, rapidly achieved plasma concentration p'ateaus, with observations on. 504
pharmacokinetics of, 662
Thermal balance on first day of life, study by direct calorimetry of, 809
Thoracoplasty, bilateral, diaphragmatic movement and spirometric volume in patients with, 340
Thromboembolism
and fibrinolytic activity, 805
oral contraceptive use in patients with, following surgery, trauma, or infection, 799
streptokinase treatment of, 324
Thrombosis
deep venous
radiological appearances of, 345
simplified phlebography in, 345
venous, radiology of, 169
Thymus
and oncogenesis, relationship between, 500
transcervical approach to, 512
Tilorone hydrochloride, lack of correlation between interferon induction and viral protection with, 658
Tissue, new stain for systemic fungi in, 804
Tobramycin, *in vitro* evaluation of, 657
Tomography. *See* Roentgenology
Trachea
cervical, rupture of, 350
primary amyloid tumor of, 659
Tracheobronchomegaly, 813
Tracheostomy, endotracheal gentamicin in bronchial infections in patients with, 318
Transpulmonary pressure, comparative features of, 165
Trauma
massive extrathoracic, hypoxic respiratory failure after, 511
oral contraceptive use in patients with thromboembolism following, 799
Treadmill walking performance, multistage, and associated cardiorespiratory response of middle-aged men, 507
Trehalose-6,6'-dimycolate, mechanism of action of, of tubercle bacilli, 661
Tuberactinomycin-N
antituberculous activity of, 794
clinical study of, 784
Tubercle bacilli
critical concentration for definition of rifampicin-resistance of, 653
mechanism of action of cord factor (trehalose-6,6'-dimycolate) of, 661
resistance pattern of, to lividomycin, 658
rifampicin-resistant, virulence of, to experimental animals, 662
virulence of, isolated in Korea during 1968-69, 354
Tuberculin
allergy and cancer risk, 159
sensitivity, specific and nonspecific in County Epirus, Greece, 353
testing, serial, and isoniazid therapy in general hospital employees, 176
Tuberculosis
aged patients with, study of electrocardiogram of, 816
chronic pulmonary, treatment of, with teryzidone, 652
control policies in transition, 505
deaths in subjects under age 50 with short disease histories, 354
diagnosed and undiagnosed, as cause of death, 353
due to *M. africanum* in Black Africans, in Paris, 353
far advanced pulmonary
evaluation of alternative regimens of SM-INH-PAS and KM-TH-CS at three month intervals in initial treatment of, 794
long-term effect of ethambutol in, 318
and Frobisher Eskimos, 799
generalized BCG, with fatal course in two sisters, 352
incidence of toxoplasma antibodies in patients with, 162
isoniazid inactivation in, 808
moderately advanced pulmonary, evalua-

tion of high dose isoniazid twice weekly regimen in primary treatment of, 794
philosophy and policy in chemotherapy of, in Southeast Asia, 795
pleuro-pulmonary, surgical treatment of, 673
pulmonary
bacteriological observations from therapeutic trials of, in Senegal, 673
changing anatomical aspects of, in resected lung, 803
changing role of surgery in treatment of, in children, 353
comparison of single and divided daily dosage regimens of chemotherapeutics in treatment of, 794
effectiveness of rifampicin in secondary treatment of, 815
electrocardiogram study of aged patients with, 673, 674
long-term follow-up of, in patients found by national tuberculosis prevalence surveys, 354
rifampicin, ethambutol and ethionamide in retreatment of, 652
rifampin in treatment of, 796
psychiatric study of aged patients with, 815
renal, arteriography findings in various stages of, 175
skin, therapeutic effect of rifampicin on, 352
use of sulphadimidine acetylation test in determining isoniazid inactivation rate in, 808

Tumor (s)
adenocarcinoma, papillary, of lung, occurrence of psammona bodies in, 804
aspergilloma
bronchial arteriography in, 668
pulmonary and pleural, surgical treatment of, 814
-associated antigen with pulmonary neoplasms, 502
carcinoma
of airways, cytological diagnosis preceding diagnosis of, 660
anaplastic, involving mediastinum, 659
anaplastic thyroid, metastases from, responding to radioiodine, 346
of breast, urinary hydroxyproline excretion in, 806
bronchial
gynecomastia and hypertrophic pulmonary osteoarthropathy syndrome in, 500
management of, by segmental resection, 347
bronchiolar (alveolar cell) as another great imitator, 802
double primary, of lung, 329
incurable obstructive esophageal, radiologic aspects of celestin tube intubation for, 500
of lung, pulmonary cryptococcosis mimicking, 660
multiple cystic cavitary alveolar-cell, 802
primary, of lung, 802
pulmonary, endocrine manifestation of, in Nigerian, 160
versus pulmonary blastomycosis, 803
carcinosarcoma, esophageal, and pseudosarcoma, 500
cells, necrosis of, related to circulatory insufficiency in pulmonary tumor embolism, 160
chemodectoma of lung, 802
choriocarcinoma, pulmonary, 330
doubling time and anatomoclinical features, relationship between, 660
Ewing's, 329
growth, enchantment of, and immunosuppression in mice with 5-fluorouracil, 807
hamartochondroma, intrabronchial, 159
intrathoracic, diagnosis of, by thin needle cytologic aspiration, 813
lipoma, benign intrathoracic, with rib erosion in infant, 801
lung, pathological factors in survival of, 500
lymphoma
advanced combination chemotherapy of, 659
non-Hodgkin's, 672
masked, in lung area, 159
mediastinal, and thymus, transcervical approach to, 512
mesenchymoma, intrathoracic, in two infants, 802
mesothelioma
of pleura in dock workers, 330
pleural malignant, histochemical demonstration of hyaluronic acid in, 660
pleural, contribution of hyaluronic acid determination in diagnosis of, 660
solitary (localized) pleural, 331
myxoma, atrial, clinical and pathologic features of, 659
neoplasms

and immunity, 330
pulmonary, tumor associated antigen with, 502
research project, Philadelphia pulmonary, 330
neurofibroma, intrapulmonary, associated with contralateral pleural effusion, 159
plasmocytoma, pulmonary, pathogenesis of, 161
primary amyloid, of trachea, 659
pseudosarcoma and esophageal carcinosarcoma, 500
seminoma, primary, of anterior mediastinum, 803
solid, treated by modified quadruple chemotherapy regime, 160
spread, investigation on, in connection with aspiration biopsy, 160
thoracic, cytological examination in diagnosis of, 159
United States
deep entomophthora phycomycotic infection reported for first time in, 664
incidence of lung cancer in, since 1955, 327
Urokinase study, implications of, concerning surgical treatment of pulmonary embolism, 348
Vascular ring, dextrocardia, left aortic arch, and tracheal compression in, 508
Vasculature, pulmonary, in tetralogy of Fallot, 345
Vein
approach, percutaneous axillary, to selective pulmonary angiography, 670
azygos, and its pleural reflections, 168
Vena cava
inferior, useful sign in recognition of azygos continuation of, 170
obstruction, superior, collateral circulation in, following ventriculoatrial shunt catheterization in hydrocephalus, 508
persistent left superior, radiologic and clinical significance of, 670
Veno-occlusive disease, pulmonary, 154
radiographic and angiographic characteristics of, 509
Venous pressure, central, percutaneous placement of catheters to monitor, 507
Ventilation
collateral, factors affecting gas exchange by, in dog, 665
distribution
and breathing patterns in tetraplegic patients and in normal subjects, 505
of, and frequency-dependence of dynamic lung compliance, 167
effect of iron-deficiency anaemia on, during sub-maximal exercise, 666
of isoproterenol-phenylephrine and salbutamol aerosols in chronic bronchitis with asthma, effect on, 323
mechanical, effects of, on pulmonary nitrogen clearance, 174
and perfusion aspects, correlation of, of chronic obstructive pulmonary disease, 796
in postoperative hypoxemia, contribution of age to maldistribution of, 341
pulmonary
and gas exchange in bronchiectasis, 167
non-linear theory of distribution of, 667
regional, xenon-133 measurement of, 668
tests, effect of diphenylhydantoin on, in airway obstruction, 808
Ventilatory
and circulatory adjustments after transplantation of lung, 351
response, chemoreflex, to CO_2 in man at low and high altitudes, 505
support, total, in quadriplegic patient with radiofrequency electrophrenic respiration, 343
Virginia, Northern, cutaneous sporotrichosis recently appearing in, 805
Viruses, rates of isolation of, from wide spectrum of clinical specimens, 801
Visual
disturbances due to ethambutol, 653
search patterns and experience with radiological images, 671
Vital capacity, effect of yoga practices on, 810
Vocal-cord cancer, analysis of failures in early, 672
Wedge, pulmonary venous, relationship of, to pulmonary arterial pressures, 165
Wegener's granulomatosis, roentgenographic observations during treatment of, 168
Weil's disease, pulmonary manifestations of, 338
Wet lung
diagnostic considerations of, 333
syndrome, use of diuretics in treatment of early, 672
Whipple's disease simulating sarcoidosis, 334
Workers
asbestos
importance of clinical, radiologic and

pulmonary function variables in evaluating chronic obstructive airway disease in, 156
study of mortality of female, 656
coal
in different coalfields in Great Britain, lung dust and lung iron contents of, 655
ex-, chronic bronchitis in, working in steel industry, 324
lung mechanics and frequency dependence of compliance in, 498
lungs of, relation between content and composition of, and radiological appearances, 325
with pneumoconiosis, simple, relationship of pulmonary impairment in, to type of radiographic opacity, 326
dock, mesothelioma of pleura in, 330
ilmenite extracting plant, health of, 325
metal, chronic exposure to iron oxide, chromium oxide, and nickel oxide fumes of, 654
newspaper, mortality of, from lung cancer and bronchitis, 327
shipyard, with pleural plaques, mortality study of, 656
Xenon-133 measurement of regional ventilation, 668
X-ray tube, microfocal spot, evaluation of radiographic imaging system with, 669
Yeasts, effect of gentamicin on growth of, 801
Yellow nail syndrome, pulmonary manifestations, 797

AMERICAN REVIEW OF RESPIRATORY DISEASE

OFFICIAL JOURNAL OF THE AMERICAN THORACIC SOCIETY
MEDICAL SECTION OF THE NATIONAL TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION

EDITOR
WALSH McDERMOTT
New York, N.Y.

CONSULTING EDITOR
ESMOND R. LONG
Philadelphia, Pa.

ASSISTANT EDITOR
MARY J. THORNTON

ASSOCIATE EDITOR
DANIEL S. LUKAS
New York, N.Y.

EDITOR OF ABSTRACTS
EDWIN D. KILBOURNE
New York, N.Y.

BOOK REVIEW EDITOR
JAMES W. RALEIGH
Houston, Texas

BUSINESS MANAGER
DAVID D. KUSKIN
New York, N.Y.

EDITORIAL BOARD

MARY ELLEN AVERY *Montreal, Canada*
IAN T. HIGGINS *Ann Arbor, Mich.*
ROBERT OSEASOHN *Albuquerque, N. Mex.*
GERARD M. TURINO *New York, N. Y.*
MARGARET R. BECKLAKE *Montreal, Canada*
ROBERT E. HYATT *Rochester, Minn.*
SAMI SAID *Dallas, Tex.*
EMANUEL WOLINSKY *Cleveland, Ohio*
REUBEN M. CHERNIACK *Winnipeg, Canada*
AVERILL A. LIEBOW *La Jolla, Calif.*
WILLIAM M. THURLBECK *Montreal, Canada*
GUY P. YOUMANS *Chicago, Ill.*
FLOYD W. DENNY, JR. *Chapel Hill, N. C.*
QUENTIN N. MYRVIK *Winston-Salem, N. C.*
DONALD F. TIERNEY *Torrance, Calif.*
MORTON M. ZISKIND *New Orleans, La.*

EDITORIAL CONSULTANTS FROM SCIENTIFIC ASSEMBLIES

Clinical Problems Assembly — HERBERT A. SALTZMAN *Durham, N. C.*
Microbiology and Immunology Assembly — ROBERT A. PATNODE *Oklahoma City, Okla.*
Pediatrics Assembly — CARL F. DOERSHUK *Cleveland, Ohio*
Respiratory Structure and Function Assembly — GARETH M. GREEN *Burlington, Vt.*
Tuberculosis Assembly — ROBERT G. LOUDON *Washington, D. C.*

EDITORIAL ASSISTANT: Paula E. Ruggiero

VOLUME 106
JULY-DECEMBER 1972

PUBLISHED MONTHLY

at 1740 Broadway, New York, N. Y. 10019

BY THE NATIONAL TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION

Copyright © 1972 by the National Tuberculosis and Respiratory Disease Association

AMERICAN REVIEW OF

Respiratory Disease

July 1972 Volume 106 Number 1

HONG KONG TUBERCULOSIS TREATMENT SERVICES/BRITISH MEDICAL RESEARCH COUNCIL INVESTIGATION	A Study in Hong Kong to Evaluate the Role of Pretreatment Susceptibility Tests in the Selection of Regimens of Chemotherapy for Pulmonary Tuberculosis	1
MYRON J. TONG, THOMAS V. N. BALLANTINE, AND DAVID B. YOUEL	Pulmonary Function Studies in *Plasmodium falciparum* Malaria	23
SANDRA D. ANDERSON, J. D. S. MCEVOY, AND S. BIANCO	Changes in Lung Volumes and Airway Resistance after Exercise in Asthmatic Subjects	30
R. M. CHERNIACK AND M. B. RABER	Normal Standards for Ventilatory Function Using an Automated Wedge Spirometer	38
R. SINHA AND E. H. BERGOFSKY	Prolonged Alteration of Lung Mechanics in Kyphoscoliosis by Positive Pressure Hyperinflation	47
TIMOTHY TAKARO	The Effects of Differences in Static Airway Pressures between Two Lungs in Experimental Unilateral Hypoxia-Hypercarbia	58
ALLEN B. COHEN AND MARTIN J. CLINE	*In Vitro* Studies of the Foamy Macrophage of Postobstructive Endogenous Lipoid Pneumonia in Man	69
MICHAEL E. WHITCOMB, MARVIN I. SCHWARZ, ALBERT R. KELLER, EUGENE P. FLANNERY, AND JOHANNES BLOM	Hodgkin's Disease of the Lung	79
K. ADLER, O. WOOTEN, W. PHILIPPOFF, E. LERNER, AND M. J. DULFANO	Physical Properties of Sputum. III. Rheologic Variability and Intrinsic Relationships	86

CASE REPORTS

JOHN W. BELL	Pancreatic-Bronchial Fistula	97
ENID R. KAFER AND JAMES LEIGH	Recurrent Respiratory Failure Associated with the Absence of Ventilatory Response to Hypercapnia and Hypoxemia	100

MARVIN I. SCHWARZ, ALLAN L. GOLDMAN, DAVID W. ROYCROFT, AND KEITH K. HUNT — Vascular Invasion by Chondrosarcoma Simulating Pulmonary Emboli — 109

NOTES

RONALD ROSENBERG, ROBERT SANDHAUS, AND AARON JANOFF — Further Studies of Human Alveolar Macrophage Alanine-*P*-Nitrophenyl Esterase. Evidence of Resistance to Endogenous Antiproteases — 114

F. S. WUSTEMAN, C. GOLD, AND J. C. WAGNER — Glycosaminoglycans and Calcification in the Lesions of Progressive Massive Fibrosis and in Pleural Plaques — 116

DAVID T. SMITH AND WILLIAM W. JOHNSTON — The Problem of the "Boost" Effect in Tuberculin Skin Testing — 118

HOWARD GRUFT — Strains of *Mycobacterium kansasii* with Weak Catalase Activity — 119

DAVID W. SHALLENBERGER AND THOMAS M. DANIEL — Quantitative Determination of Several Pleural Fluid Proteins — 121

S. G. BRADLEY — Reassociation of Deoxyribonucleic Acid from Selected Mycobacteria with that from *Mycobacterium bovis* and *Mycobacterium farcinica* — 122

VETERANS ADMINISTRATION CONFERENCE

EMIL ROTHSTEIN — The Thirty-First Veterans Administration—Armed Forces Pulmonary Disease Research Conference — 125

WILLIAM B. TUCKER — The Veterans Administration—Armed Forces Cooperative Studies in the Chemotherapy of Tuberculosis—A Perspective — 139

MYCOBACTERIAL ANTIGEN WORKSHOP

An Evaluation of a Reference System for Antigens of *Mycobacterium tuberculosis* — 142

AMERICAN THORACIC SOCIETY

Notices — 148

ABSTRACTS — 151

PROFESSIONAL RECRUITMENT — 177

AMERICAN REVIEW OF

Respiratory Disease

August 1972 Volume 106 Number 2

FURADOON A. IRANI, NORMAN L. JONES, MICHAEL GENT, AND MICHAEL T. NEWHOUSE	Evaluation of Disodium Cromoglycate in Intrinsic and Extrinsic Asthma	179
DONALD C. ZAVALA AND GEORGE N. BEDELL	Percutaneous Lung Biopsy with a Cutting Needle. An Analysis of 40 Cases and Comparison with Other Biopsy Techniques	186
JEANNE A. SMITH AND LEE B. REICHMAN	Lymphocyte Transformation. An Aid in the Diagnosis of Tuberculosis in Patients with Nonreactive Skin Tests	194
JULIUS KATZ, SOLOMON KUNOFSKY, AND ALEXANDER KRASNITZ	Variation in Sensitivity to Tuberculin	202
R. G. MOULTON, T. M. DIETZ, AND S. MARCUS	Isolation of Specific and Nonspecific Components from Purified Protein Derivative	213
B. A. MUGGENBURG, J. L. MAUDERLY, J. A. PICKRELL, T. L. CHIFFELLE, R. K. JONES, U. C. LUFT, R. O. MCCLELLAN, AND R. C. PFLEGER	Pathophysiologic Sequelae of Bronchopulmonary Lavage in the Dog	219
CHANG SHIM, PRUDENCIO CORRO, SUNG SUH PARK, AND M. HENRY WILLIAMS, JR.	Pulmonary Function Studies in Patients with Upper Airway Obstruction	233
S. C. POH	The Effects of Opium Smoking in Cigarette Smokers	239
J. L. DA COSTA, E. P. C. TOCK, AND H. K. BOEY	Chronic Obstructive Lung Disease in Singapore	246

CASE REPORTS

JOHN A. MOHR, C. DOWELL PATTERSON, BOB G. EATON, EVERETT R. RHOADES, AND NED B. NICHOLS	Primary Pulmonary Sporotrichosis	260

ROBERT H. ALFORD, J. THOMAS JOHN, AND RICHARD E. BRYANT — Tularemia Treated Successfully with Gentamicin — 265

NOTES

KIYO SUSHIDA AND NORIMASA HIRANO — Isolation from Media of Two Bacteriophages, Protamylase-H37Rv (PH) Active Against *Mycobacterium tuberculosis* — 269

THOMAS THOMAS, JR. AND DONALD MASSARO — Lipid Biosynthesis from Ethanol by Rabbit Lung — 271

DAVID R. DANTZKER, HARRY N. STEINBERG, AND JOSEPH E. KMIECIK — Primary Drug-Resistant Tuberculosis in Vietnam Veterans 1967 to 1970 — 273

PATTISAPU R. GANGADHARAM AND KATHARINE H. K. HSU — *Mycobacterium abscessus* Infection in a Puncture Wound — 275

ROBERT D. GELLER, JAMES E. MAYNARD, VIRGINIA JONES, AND FRED E. TOSH — Coccidioidin Skin Testing by Intradermal Jet Injection — 278

CORRESPONDENCE — 281

LEROY HYDE, Hypersensitivity Reactions and Liver Toxicity Attributed to Isoniazid; SHIRLEY FEREBEE WOOLPERT; PHYLLIS Q. EDWARDS, The Tuberculin Skin Test; R. J. ABLIN, Elevation of Serum IGA in Emphysema; E. MANKIEWICZ AND J. E. BÉLAND, Failure to Produce Experimental Sarcoidosis in Guinea Pigs with *Mycobatcerium tuberculosis* and Mycobacteriophage DS6A; CLAUDE A. FRAZIER, Role of Faith or Religion in Healing

AMERICAN THORACIC SOCIETY:

Notices — 286

Training Programs in Respiratory Disease: 1972 — 289

Training Programs in Pediatric Respiratory Disease: 1972 — 311

ABSTRACTS — 317

PROFESSIONAL RECRUITMENT — 356

AMERICAN REVIEW OF

Respiratory Disease

September 1972 Volume 106 Number 3

RICHARD A. GARIBALDI, RONALD E. DRUSIN, SHIRLEY H. FEREBEE, AND MICHAEL B. GREGG	Isoniazid-Associated Hepatitis. Report of an Outbreak	357
JOHN T. OLIVE, JR., AND ROBERT E. HYATT	Maximal Expiratory Flow and Total Respiratory Resistance During Induced Bronchoconstriction in Asthmatic Subjects	366
DAVID N. OSTROW AND REUBEN M. CHERNIACK	The Mechanical Properties of the Lungs in Intermediate Deficiency of a_1-Antitrypsin	377
BURTON MASS, TOGO IKEDA, DAVID R. MERANZE, GEORGE WEINBAUM, AND PHILIP KIMBEL	Induction of Experimental Emphysema. Cellular and Species Specificity	384
SUETARO WATANABE, ATTILIO D. RENZETTI, JR., AND ADELBERT BIGLER	Bronchodilator and Corticosteroid Effects on Regional and Total Airway Resistance in Patients with Asthma, Chronic Bronchitis, and Chronic Pulmonary Emphysema	392
S. R. KAMAT AND B. C. BANERJI	Study of Cardiopulmonary Function on Exposure to High Altitude. I. Acute Acclimatization to an Altitude of 3,500 to 4,000 Meters in Relation to Altitude Sickness and Cardiopulmonary Function	404
S. R. KAMAT, T. L. RAO, B. S. SARMA, C. VENKATARAMAN, AND V. R. K. RAJU	Study of Cardiopulmonary Function on Exposure to High Altitude. II. Effects of Prolonged Stay at 3,500 to 4,000 Meters and Reversal on Return to Sea Level	414
J. J. G. D'OLIVEIRA	Cerebrospinal Fluid Concentrations of Rifampin in Meningeal Tuberculosis	432
I. B. ANDERSEN, G. R. LUNDQVIST, AND DONALD F. PROCTOR	Human Nasal Mucosal Function Under Four Controlled Humidities	438
MOLLY P. WEIR, W. H. R. LANGRIDGE, III, AND R. W. WALKER	Relationships Between Oleic Acid Uptake and Lipid Metabolism in *Mycobacterium smegmatis*	450

CASE REPORTS

EDWIN N. SCHACHTER AND RONALD J. KARPICK	Relapsing Tuberculous Meningitis Complicated by Late Sequelae	458
W. A. CARSWELL	A Case of Sarcoidosis Presenting with Erythema Multiforme	462
J. R. MIKHAIL, D. N. MITCHELL, JENNIFER L. DYSON, W. JONES WILLIAMS, T. O. O. OGUNLESI, AND S. E. VAN HEIN-WALLACE	Sarcoidosis with Genital Involvement	465
J. D. SCHMIDT, H. YEAGER, JR., E. B. SMITH, AND J. W. RALEIGH	Cutaneous Infection due to a Runyon *Group III* Atypical *Mycobacterium*	469

NOTES

SEYMOUR KATZ, ARNOLD ABERMAN, URI I. FRAND, ISRAEL M. STEIN, AND MILFORD FULOP	Heroin Pulmonary Edema. Evidence for Increased Pulmonary Capillary Permeability	472
TERUMASA MIYAMOTO, JUNZABURO KABE, AND TATSUSHI ISHIZAKI	Follow-Up Studies in Subjects with Airway Tract Sensitive to Acetylcholine	475
JOANNE BLONDIN, RONALD ROSENBERG, AND AARON JANOFF	An Inhibitor in Human Lung Macrophages Active Against Human Neutrophil Elastase	477
C. I. LEWIS, J. C. MC GEADY, J. R. WAGNER, F. J. SCHULTZ, AND A. W. SPEARS	Dichlorbenzophenone as a Nonradioactive Tracer for Cigarette Smoke-Gas Chromatographic Analysis of Tracer	480
JAMES T. DOVE, SOTIROS D. CHAPARAS, AND SALLY HEDRICK	Failure to Demonstrate Transformation of Lymphocytes of Patients with Isoniazid-Associated Hepatitis	485
	BOOKS	488
	AMERICAN THORACIC SOCIETY	
	Notices	491
	ABSTRACTS	495
	PROFESSIONAL RECRUITMENT	513
	ERRATUM	514

AMERICAN REVIEW OF

Respiratory Disease

October 1972 Volume 106 Number 4

P. VERMEIRE, J. TASSON, H. LAMONT, F. BARBIER, J. VERSIECK, AND F. DEROM	Respiratory Function after Lung Homotransplantation with a Ten-Month Survival in Man	515
WILLIAM D. WIGLE, MARY JANE ASHLEY, EVA M. KILLOUGH, AND MARY COSENS	Bovine Tuberculosis in Humans in Ontario. The Epidemiologic Features of 31 Active Cases Occurring between 1964 and 1970	528
GEORGE T. WOODS	Evidence for Periodicity of Swine Influenza in Illinois—1963 to 1970	535
DONALD C. ZAVALA, NICHOLAS P. ROSSI, NATHANIEL F. RODMAN, GEORGE N. BEDELL, AND EDNA PIXLEY	A New Mobile Catheter for Obtaining Bronchial Brush Biopsies. Diagnostic Results in 50 Patients with Suspicious Pulmonary Lesions and Negative Bronchoscopies	541
NIKOLAUS KONIETZKO, HERMANN SCHLEHE, KARL H. RÜHLE, GÜNTHER OVERRATH, FRANZ BITTER, W. E. ADAM, AND HEINRICH MATTHYS	Regional Lung Function in Different Body Positions in Patients with Pulmonary Tuberculosis	548
HELENA GILDER AND CHARLES K. MCSHERRY	An Improved Method for Measuring the Incorporation of Palmitic Acid into Lung Lecithin	556
G. FREEMAN, S. C. CRANE, N. J. FURIOSI, R. J. STEPHENS, M. J. EVANS, AND W. D. MOORE	Covert Reduction in Ventilatory Surface in Rats During Prolonged Exposure to Subacute Nitrogen Dioxide	563
SUZANNE DANDOY AND SHELDON B. ELMAN	Current Status of General Hospital Use for Tuberculous Patients in the United States	580
EDWIN N. SCHACHTER	Tuberculin Negative Tuberculosis	587
	CASE REPORTS	
EDGAR RILEY AND WILLIAM G. CAHAN	Pulmonary Cryptococcoccis followed by Pulmonary Tuberculosis	594
OM P. SHARMA AND STEBBIN M. CHANDOR	IgA Deficiency in Sarcoidosis	600

NOTES

FRANKLIN K. BROUGH, C. DU WAYNE SCHMIDT, MARION DICKMAN, AND BETTY JACKSON	Effect of Two Instructional Procedures on the Performance of the Spirometry Test in Children Five Through Seven Years of Age	604
JOHN WILLIAM TAYLOR AND LOIS STRAUSS	Fluorescence Microscopy of Tubercle Bacilli Using Inexpensive Apparatus	607
E. MANKIEWICZ AND M. G. TAMARI	Lysogeny and Deoxyribonuclease Production in Mycobacteria	609
THOMAS H. HOLMES, BEVERLEY A. MORGAN, AND COLIN R. WOOLF	The Effect of Disodium Cromoglycate on Plasma 17-Hydroxycorticoid Concentration During Exercise	610
S. T. CHIANG	Application of Desk-Top Computer in Clinical Spirometry. An Automatic Calculation and Diagnosis Program	614
DOUGLAS R. GRACEY, MATTHEW B. DIVERTIE, AND ARNOLD L. BROWN, JR.	Alveolar-Capillary Membrane in Pulmonary Sarcoidosis: An Electron Microscopic Study	617

CORRESPONDENCE

DOUGLAS R. GRACEY, Inhalation Therapy Contract Service; IRVING KASS, A Way to Classify Chronic Obstructive Pulmonary Diseases; DAVID J. DAWSON, Tests for Niacin Production; PETER B. BARLOW, The Tuberculin Skin Test 622

NATIONAL HEART AND LUNG INSTITUTE: Workshop on Pediatric Pulmonary Diseases 625

NATIONAL TUBERCULOSIS AND RESPIRATORY DISEASE ASSOCIATION: The Award of the Trudeau Medal for 1972; The Award of the Will Ross Medal for 1972 626

AMERICAN THORACIC SOCIETY 635

Preliminary Report of the Subcommittee on Visual Aids of the Teachers Conference of the Eastern Section of the American Thoracic Society

Notices 647

ABSTRACTS 651

PROFESSIONAL RECRUITMENT 675

AMERICAN REVIEW OF

Respiratory Disease

November 1972 Volume 106 Number 5

ERIC J. CASSELL, MICHAEL LEBOWITZ, AND JAMES R. MCCARROLL	The Relationship between Air Pollution, Weather, and Symptoms in an Urban Population. Clarification of Conflicting Findings	677
PAUL GROSS AND ROBERT T. P. DETREVILLE	The Lung as an Embattled Domain Against Inanimate Pollutants. A Precis of Mechanisms	684
ANN J. WOOLCOCK, M. H. COLMAN, AND C. R. B. BLACKBURN	Factors Affecting Normal Values for Ventilatory Lung Function	692
A. MANSELL, H. LEVISON, K. KRUGER, AND T. L. TRIPP	Measurement of Respiratory Resistance in Children by Forced Oscillations	710
FRANK F. DAVIDSON AND JOHN F. MURRAY	Use of Pulmonary Diffusing Capacity Measurements to Detect Unsuspected Fat Embolism	715
F. J. AL BAZZAZ AND HOMAYOUN KAZEMI	Arterial Hypoxemia and Distribution of Pulmonary Perfusion after Uncomplicated Myocardial Infarction	721
DONALD P. TASHKIN AND DANIEL H. SIMMONS	Effect of Carbon Dioxide Breathing on Specific Airway Conductance in Normal and Asthmatic Subjects	729
DAVID M. TRAVIS, LESTER L. ROLF, AND KENNETH A. BERDICK	Respiratory Failure in Oxygen-Induced Lung Disease. A Study of Survival, Development of Hypoxemia, and Response to Benzolamide	740
M. H. FINE, M. L. FURCOLOW, E. W. CHICK, D. S. BAUMAN, AND M. ARIK	Tuberculin Skin Test Reactions. Effects of Revised Classification on Comparative Evaluations	752

CASE REPORTS

J. B. KUPLIC, C. S. HIGLEY, AND D. E. NIEWOEHNER	Pulmonary Ossification Associated with Long-Term Busulfan Therapy in Chronic Myeloid Leukemia	759
OM P. SHARMA AND OSCAR J. BALCHUM	Alcohol-Induced Pain and Itching on Hot Shower in Sarcoidosis. An Unusual Association	763

NOTES

ROBERT J. MASON, VINCENT MANGANIELLO, AND MARTHA VAUGHAN — Effect of Thyroxine on the Disaturated Lecithin Content of Lung — 767

T. YAMADA, K. KAWAGUCHI, K. MASUDA, K. SHOJI, AND M. HORI — Inhibition of Polyphenylalanine Synthesis on Ribosomes of Mycobacteria by Tuberactinomycin -N — 769

JOHN A. KIBELSTIS AND HAROLD RESNICK — Serum Trypsin Inhibitor Capacity and Purulent Sputum — 772

COLIN RATLEDGE AND KEITH A. BROWN — Inhibition of Mycobactin Formation in *Mycobacterium smegmatis* by *p*-Aminosalicylate. A New Proposal for the Mode of Action of *p*-Aminosalicylate — 774

FREDERICK L. GLAUSER AND JAMES F. MORRIS — Accuracy of Routine Arterial Puncture for the Determination of Oxygen and Carbon Dioxide Tensions — 776

BERNARD W. JANICKI, STEPHEN A. ARON, AND ANILBARAN RAYCHAUDHURI — Separation and Isolation of Mycobacterial Antigens By Continuous-Flow Electrophoresis — 779

CORRESPONDENCE

THOMAS L. PETTY, Bronchospasm in Asthma; HARRY BAKER; M. W. HINDS, Pregnancy and Tuberculosis; DONALD L. BRUMMER; O. K. LITHERLAND, Acute Pulmonary Hypersensitivity to Furazolidone; GEORGE A. PANKEY; MORRIS A. GORDON, Pulmonary Cryptococcosis. A Case Due to *Cryptococcus albidus* — 784

BOOKS — 788

AMERICAN THORACIC SOCIETY

Notices — 790

ABSTRACTS — 793

PROFESSIONAL RECRUITMENT — 817

AMERICAN REVIEW OF

Respiratory Disease

December 1972 Volume 106 Number 6

DARIO T. CAPPUCCI, JR., JAMES L. O'SHEA, AND G. DALE SMITH	An Epidemiologic Account of Tuberculosis Transmitted from Man to Monkey	819
MICHAEL D. LEBOWITZ, ERIC J. CASSELL, AND JAMES MCCARROLL	Health and the Urban Environment. XI. The Incidence and Burden of Minor Illness in a Healthy Population: Methods, Symptoms, and Incidence	824
MICHAEL D. LEBOWITZ, ERIC J. CASSELL, AND JAMES MCCARROLL	Health and the Urban Environment. XII. The Incidence and Burden of Minor Illness in a Healthy Population: Duration, Severity, and Burden.	835
MICHAEL D. LEBOWITZ, ERIC J. CASSELL, AND JAMES MCCARROLL	Health and the Urban Environment. XIII. The Incidence and Burden of Minor Illness in a Healthy Population: Familial Spread	842
JEROLD D. MOSS, JAMES E. LEWIS, AND C. MICHAEL KNAUER	Isoniazid-Associated Hepatitis. A Study of Five Cases	849
RUY V. LOURENÇO, ROBERT LODDENKEMPER, AND ROBERT W. CARTON	Patterns of Distribution and Clearance of Aerosols in Patients with Bronchiectasis	857
NORA CHANG AND HENRY LEVISON	The Effect of a Nebulized Bronchodilator Administered with or without Intermittent Positive Pressure Breathing on Ventilatory Function in Children with Cystic Fibrosis and Asthma	867
D. J. HILL, L. I. LANDAU, AND P. D. PHELAN	Small Airway Disease in Asymptomatic Asthmatic Adolescents	873
R. SINHA, M. A. TINKER, R. HIZON, AND P. H. GERST	Metabolic Acidosis and Lung Mechanics in Dogs. To Simulate a Clinical Condition	881
G. K. KHULLER AND P. J. BRENNAN	The Mannophosphoinositides of the Unclassified Mycobacterium P_6	892
SANFORD H. SCHWARTZ	Tuberculosis: Surveillance or Control	897

CASE REPORTS

GENE M. EARL, JR., JOHN A. MOHR, RONALD H. WHITE, AND PAUL D. STEIN	Subclavian Arterial-Pulmonary Arterial Fistula Associated with Healed Cavitary Tuberculosis	898
LLEWELLYN N. ROBERTS, GINO MONTESSORI, AND JOHN G. PATTERSON	Idiopathic Pulmonary Hemosiderosis. Case Report with Pulmonary Function Tests and Cardiac Catheterization Data	904
FRANCISCO PEREZ-GUERRA, LIONEL E. HARKLEROAD, RONALD E. WALSH, AND JOHN J. COSTANZI	Acute Bleomycin Lung	909

NOTES

K. M. JANIS AND GRANT FLETCHER	Oxygen Tension Measurements in Small Samples. Sampling Errors	914
LOUIS LEVY AND NANCY MOON	Inhibition of the Multiplication of *Mycobacterium leprae* by Methimazole	917
MALEK M. NAZEMI, DANIEL M. MUSHER, AND R. RUSSELL MARTIN	A Practical Method for Monitoring Bacterial Contamination of Inhalation Therapy Machines	920
HUGO L. DAVID, ELIO SANCHEZ, RAYMOND F. CORPE, AND WILLIAM DUNN	Reagent-Impregnated Paper Strip for Detection of Metabolic Products of Isoniazid in Urine	923
J. S. ROGER JONES, ATTILIO D. RENZETTI, JR., AND MARCIA M. MITCHELL	The Maximal Breathing Capacity in Extrathoracic Airway Obstruction	925

CORRESPONDENCE

HARRY BAKER, Inhaled Water Droplets, MARY ELLEN AVERY, NORMAN ASPIN, and HENRY LEVISON; THEODORE L. BADGER, Change of Name for NTRDA; ROSCOE C. YOUNG, JR., Treatment of Sarcoidosis; CHARLES KUHN, Systemic Lupus Erythematosus in a Patient with Ultrastructural Lesions of the Pulmonary Capillaries Previously Reported in the *Review* as due to Idiopathic Pulmonary Hemosiderosis — 928

AMERICAN THORACIC SOCIETY

Notices — 933

PROFESSIONAL RECRUITMENT — 936

ERRATUM — 937

INDEX, VOLUME 106:

Index of Authors — 939

Index of Subjects — 943

Index of Abstracts — 951